

GE

CA

GEOLOGICAL SURVEY OF CANADA.
ALFRED R. C. SELWYN, LL.D., F.R.S., F.G.S., DIRECTOR.

CATALOGUE
OF
CANADIAN PLANTS.

PART I.—POLYPETALÆ.

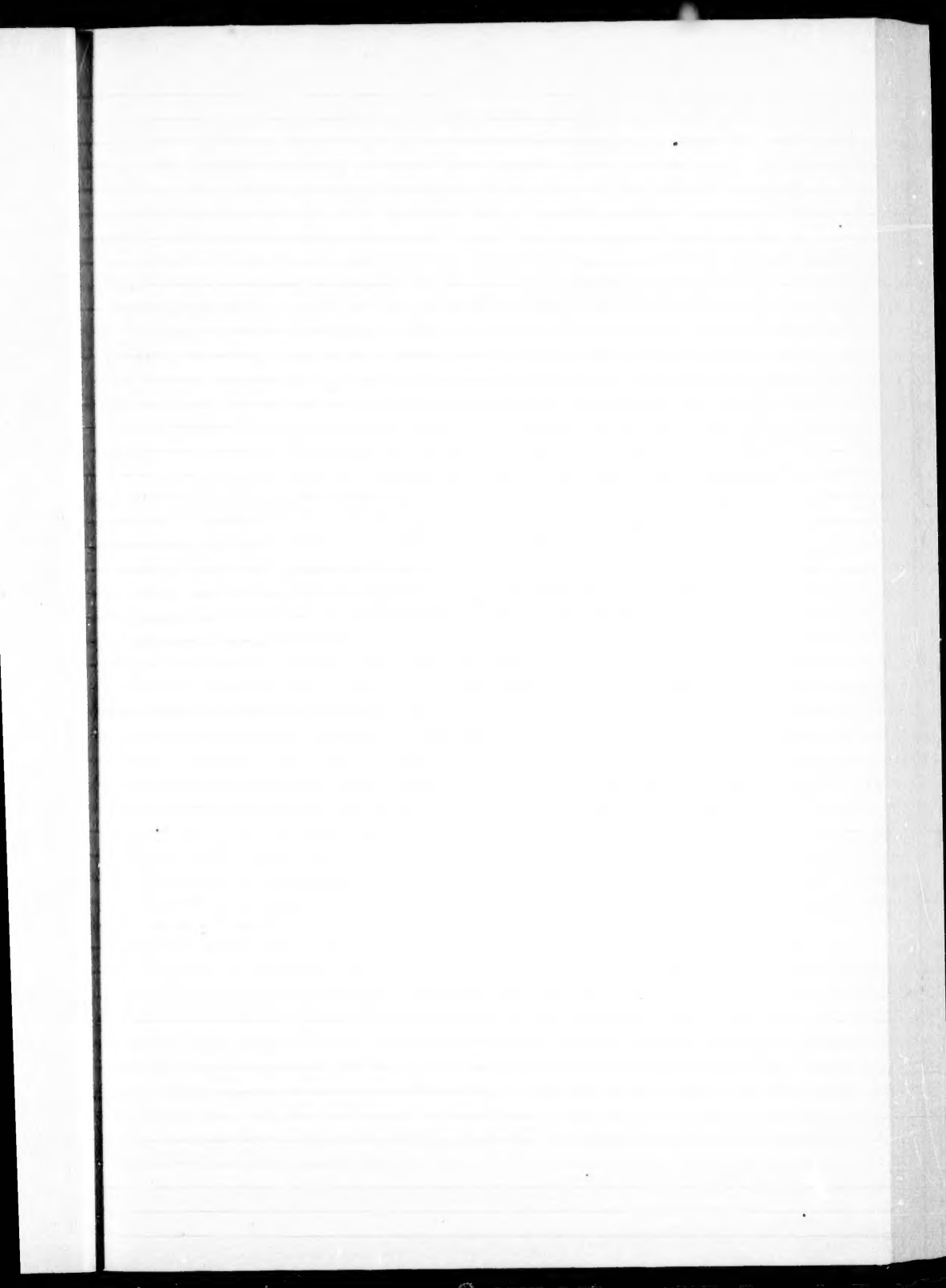
BY
JOHN MACOUN, M.A., F.L.S., F.R.S.C.



Montreal:
DAWSON BROTHERS.
—
1883.

OK 201
M3
c.2
pt. 1

223442



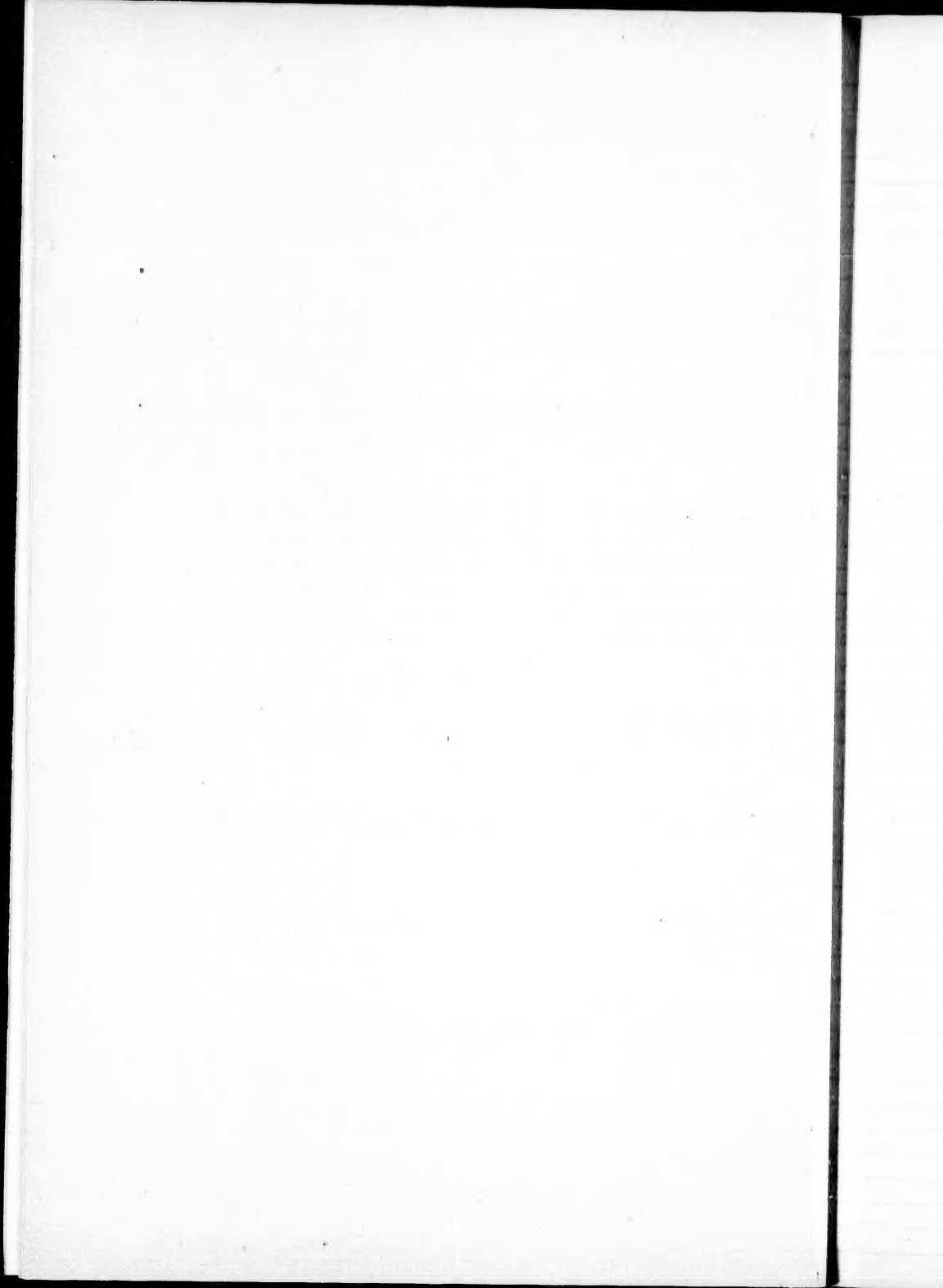
In t
plants
far as
This, t
soon as
lections

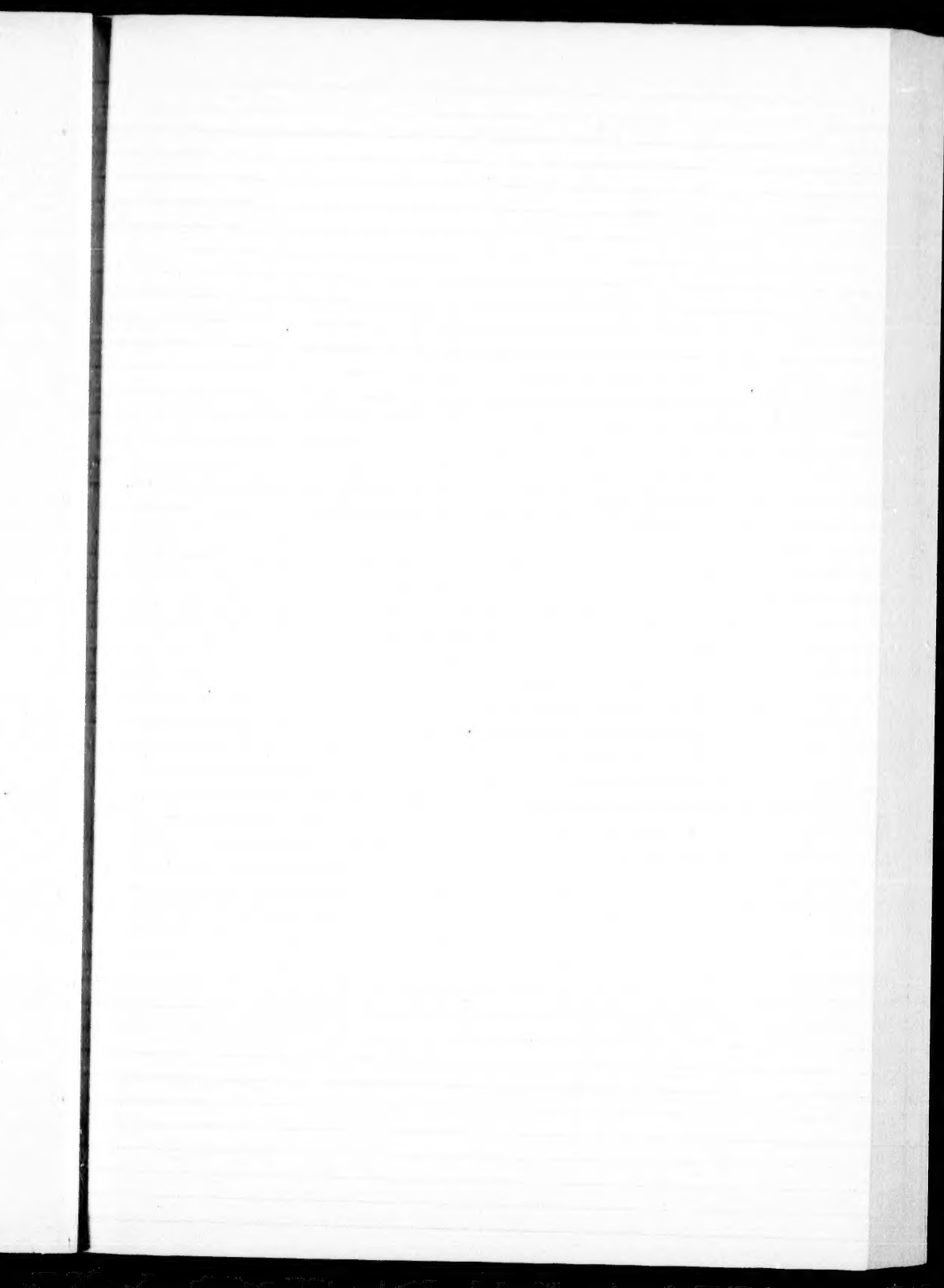
OTTA

In this publication it is intended to enumerate systematically the plants of the Dominion of Canada, and to define their range in so far as the knowledge at present available enables this to be done. This, the first part of the Catalogue, will be followed by others, as soon as it is possible to complete the necessary examination of collections and authorities.

ALFRED R. C. SELWYN.

OTTAWA, May, 1883.





THE
botanis
extent
Catalog
or make
of a few
way of

Forty
great w
knowled
traveller
publishe
the Poly
the Com
thirty-fi
in the y
know of
sionally

In giv
all publi
Eastern
decision
would pu
gentleme
various p
other col

Throug
tho very

PREFACE.

THE purpose of this work is to place in the hands of Canadian botanists, in a connected form, the knowledge so far obtained of the extent and distribution of the Flora of Canada. It is believed that this Catalogue will satisfy a long-felt want, and enable botanists to add to, or make more accurate, the data at present available, and in the course of a few years remove the serious difficulties which now stand in the way of a "Flora of Canada."

Forty-three years ago Sir William Jackson Hooker published his great work the "*Flora Boreali Americana*," and in it recorded all the knowledge obtained of species and their distribution by the early travellers and explorers. In the same year, 1840, Torrey and Gray published their work on the Flora of North America, which included the Polypetalæ only. Three years later the Gamopetalæ to the end of the Composite, was published by the same authors. After the lapse of thirty-five years Dr. Asa Gray published the remaining Gamopetalæ in the year 1878. The four works above enumerated contain all we know of Canadian botany, beyond the lists which have appeared occasionally in Canadian scientific publications.

In giving the distribution of species I have freely availed myself of all published records. My own observations, having extended from the Eastern Provinces to the Pacific, enable me to speak with accuracy and decision on many points which a more limited knowledge of distribution would preclude. The collections made during the last ten years by the gentlemen on the staff of the Geological and Natural History Survey in various parts of Canada have been examined by me, and also many other collections made in Ontario.

Through the kindness of Principal Dawson I have likewise examined the very large Herbarium of McGill College and the collections of Dr.

Holmes, made in the neighborhood of Montreal as early as 1821. The McGill College collections are from all parts of Canada, but chiefly from Quebec, and are of very great scientific interest. *

For our notices of Newfoundland plants, besides the volumes mentioned above, we are indebted to the late Dr. John Bell, who published a list of plants collected by him on the west coast of that island in the summer of 1867, in the *Canadian Naturalist* for 1869; and to the McGill College Herbarium.

Our knowledge of the Nova Scotia flora is derived chiefly from a list published in the *Proceedings and Transactions of the Nova Scotian Institute of Natural Science* for 1875-76, to which the following gentlemen contribute:—Prof. How, D.C.L., King's College, Windsor, N. S.; Prof. Lawson, Ph.D., LL.D., Dalhousie College, Halifax, N. S.; Prof. Sommers, M.D., Halifax Medical College; Rev. E. H. Ball, St. Luke's, Halifax, N. S.; D. A. Campbell, M.D., C.M., Halifax Medical College; A. W. H. Lindsay, M.D., Halifax, N. S. In addition to the published catalogue, A. H. McKay, B.A., Principal of the Pietou Academy, N. S., sent me a very valuable manuscript list of his own extensive collections in that province and the islands in the Gulf of St. Lawrence. McGill College Herbarium also supplies additional matter.

New Brunswick notices are principally from a catalogue of New Brunswick plants, published in the years 1878-79, by the Rev. James Fowler, M.A., Professor of Natural History, Queen's College, Kingston, Ont., but late Science Master in the Normal School at Fredericton, N. B. The *Bulletin of the Natural History Society of New Brunswick* for the years 1882-83 contains additional notices both of species and localities. Contributions from the following gentlemen are also acknowledged: G. F. Matthew, M.A., Prof. Bailey, Messrs. G. U. Hay, James Vroom, Robert Chalmers, James Moser, Arthur J. Trueman, J. Brittain, G. H. Burnett and J. E. Wetmore.

Our knowledge of the Quebec flora is obtained from the following sources: A catalogue of the plants collected by the late Dr. Andrew Holmes in the vicinity of Montreal about the year 1821. The plants themselves are in the Herbarium of McGill College. Dr. Thomas' list of the plants growing at Rivière du Loup and on the Island of Orleans. L'Abbé Ovide Brunet's Catalogue, published in 1865 by himself, and distributed to his friends, gave all the Canadian plants in the Herbarium of Laval University, Quebec. W. S. M. D'Urban collected, in the year

*Among the principal contributors to the McGill College Herbarium, the following may be mentioned:—Dr. Andrew Holmes, Miss Brodie, Rev. Mr. Butler, D. F. H. Wilkins, B.A., Labrador plants; Mr. George Barnston, Arctic plants; H. E. Trapnell, Newfoundland plants; W. W. Doherty, New Brunswick plants; Principal Dawson, Dr. F. W. Kelley, Nova Scotian plants. Also Dr. R. S. McConnell, Dr. B. J. Harrington, Dr. C. E. Graham, Dr. B. J. Wales, Dr. John Bell, and Messrs. W. B. Dawson, B.A., H. H. Lyman, B.A., R. G. McConnell, B.A., D. Currie, B.A., L. M. England, B.A., Walter Lyman, B.A., J. C. McRae, J. A. Porter, B.A., R. C. Kirkpatrick, James Meahan and G. H. Blackadar.

The
y from

s men-
blished
in the
McGill

a list
ecotian
gentle-
N. S. ;
Prof.
anke's,
llege ;
lished
N. S.,
ctions
McGill

New
James
gston,
N. B.
or the
ilities.
lged :
room,
G. H.

owing
ndrew
plants
list of
leans.
f, and
arium
year

may be
, B.A.,
plants ;
Scotian
Wales,
l, B.A.,
, B.A.,

1858,
the C
been
vanch
few ot
explor
as not
McGill
Montr
culled

Onta
distric
of the
in the
include
umberl
of Tor
line of
vicinity
Lake S
Thunde
tiquia F
the lat
Canada
fully ex
logical
the Insa
man ha
and he
H. B. Sp
largely
Todd, M
collection
Hooker,

Dr. R
along th
to James
of the N

The g
been pre
Dawson,
embrace
Woods to

1858, in the counties of Argenteuil and Ottawa, and published the list in the *Canadian Naturalist and Geologist* for 1861. A few additions have been obtained from the *Canadian Flora*, published by L'Abbe Provancher, and from Dr. MacLagan, who collected near Montreal, and at a few other localities in the province of Quebec. The results of my own explorations in Gaspé during the summer of 1882 are included, as well as notes obtained from an examination of the various collections in McGill College and the Herbarium of the Natural History Society of Montreal. Anything relating to the flora of the province that could be culled from Sir William Hooker's *Flora* is likewise added.

Ontario has been pretty thoroughly worked up in almost every district. The eastern part by Mr. James Fletcher and Mr. R. B. Whyte, of the Ottawa Field Naturalists' Club, and by the late B. Billings, Esq., in the neighborhood of Prescott and Brockville. My own explorations include the counties of Prince Edward, Addington, Hastings, Northumberland, Peterboro and Victoria, in the central district; the vicinity of Toronto, the Niagara Peninsula, the country along Lake Erie and the line of the Canada Southern railway, Pelee Point and Island, the vicinity of Owen Sound and the Bruce Peninsula; the north shore of Lake Superior, and the whole extent of the Dawson Route, from Thunder Bay to Manitoba, including the valley of the Kaministiquia River. The neighborhood of Hamilton has been well explored by the late Judge Logie and J. M. Buchan, M.A., principal of Upper Canada College, Toronto. The district around London has been carefully examined by William Saunders, Esq., President of the Entomological Society, and Dr. Thomas Burgess, Assistant Superintendent of the Insane Asylum of that city. The researches of the latter gentleman have extended from Niagara Falls to Muskoka and Parry Sound, and he has added many rare southern forms to the flora of the province. H. B. Spotten, M.A., Principal of Barrie High School, has collected largely in the vicinity of Lake Simcoe. The eminent Douglas, Dr. Todd, Mr. Goldie and Dr. MacLagan have also done good service. The collections of the three first named were examined by Sir William Hooker, and all localities credited to them are taken from his work.

Dr. Robert Bell has collected in the country north of Lake Superior, along the shores of Lake Huron and in the country extending northward to James' Bay, along the east coast of Hudson's Bay, and in the valleys of the Nelson and Churchill Rivers, and the intervening district.

The great plains between Manitoba and the Rocky Mountains have been pretty thoroughly examined. The collection made by Dr. G. M. Dawson, while geologist and naturalist to the Boundary Commission, embraces the whole flora of the 49th parallel, from the Lake of the Woods to the Rocky Mountains. During the summers of 1872, 1875,

1879 and the two following years, I made extensive journeys through both the prairie region and the wooded country to the north, as far as Lat. 59°, including the whole length of the great Peace River. M. Bourgeau, while botanist to Captain Palliser's expedition in 1857-58, made numerous traverses of the country bordering on the Saskatchewan and southward. Douglas and Drummond explored the whole country from the Red and Assiniboine Rivers, by the North Saskatchewan and Athabasca to the Rocky Mountains. The former passed across the Rocky Mountains by the Athabasca Pass, and examined the entire length of the valley of the Columbia, while the latter collected in the main range of the Rocky Mountains, between Lat. 52°-56°, and particularly in that part about the head of Smoky River, a tributary of the Peace. Sir John Richardson and other Arctic explorers noted and collected the plants of the wooded country from Hudson's Bay to the Arctic Sea, its coasts and islands, including the country north of the Saskatchewan and the whole valley of the Mackenzie.

Our knowledge of the Rocky Mountain region proper is still, however, very imperfect. Dr. G. M. Dawson has examined the region in the vicinity of the South Kootanie Pass, near the 49th parallel, and traversed the mountains by the Pine Pass, in Lat. 55°. In September, 1879, I ascended the Bow River Pass for a few miles, and obtained some knowledge of its alpine flora. Bourgeau also spent some time, in August, 1858, in the Bow River Pass and on the adjacent mountains, and made extensive collections. Douglas' and Drummond's explorations have already been referred to, but the latter may be said to have given us the most valuable information, as he spent a whole summer in the mountains. I examined the Peace River Pass and ascended Mount Selwyn at its western end, in 1875, but owing to the loss of the collections the results obtained were not satisfactory.

British Columbia, also, still requires much attention. Besides the early explorers mentioned by Hooker, the following are our sources of information: During the early part of 1875 I made very extensive collections on Vancouver Island near Victoria, and all the way, by the valley of the Fraser, from the coast to Fort MacLeod at the western base of the Rocky Mountains, in Lat. 55°. Dr. G. M. Dawson has collected on Vancouver Island, in the valley of the Fraser, and in the country lying west of it to the Coast Ranges, in 1875-76. In the summer of 1877 in southern British Columbia on the Cascades and dry valleys lying to the east. The summer of 1878 was spent by him in the Queen Charlotte Islands, and in 1879 a traverse was made to the Rocky Mountains by way of the Skeena. A. J. Hill, C.E., has added considerably to our knowledge of the flora of the Fraser and Thompson Rivers, during the summers of 1880-81-82.

rough
far as
M.
5-58,
atch-
whole
atch-
assed
d the
ected
, and
ry of
l and
o the
f the

how-
on in
, and
nber,
ained
time,
ains,
olora-
have
nmer
nded
f the

the
es of
nsive
y the
stern
has
nd in
In
s and
him
o the
dded
pson

Alas
western
ences t
Dr. J.
Smiths

All p
land an
in the

In c
means
of Cana
define

OTTA

Alaska has been included in the catalogue, as its flora is that of our western coast and north-western interior region. Besides the references to it taken from Hooker's *Flora Boreali Americana*, I have used Dr. J. T. Rothrock's *Catalogue of Alaskan Plants*, published in the *Smithsonian Report* for the year 1867.

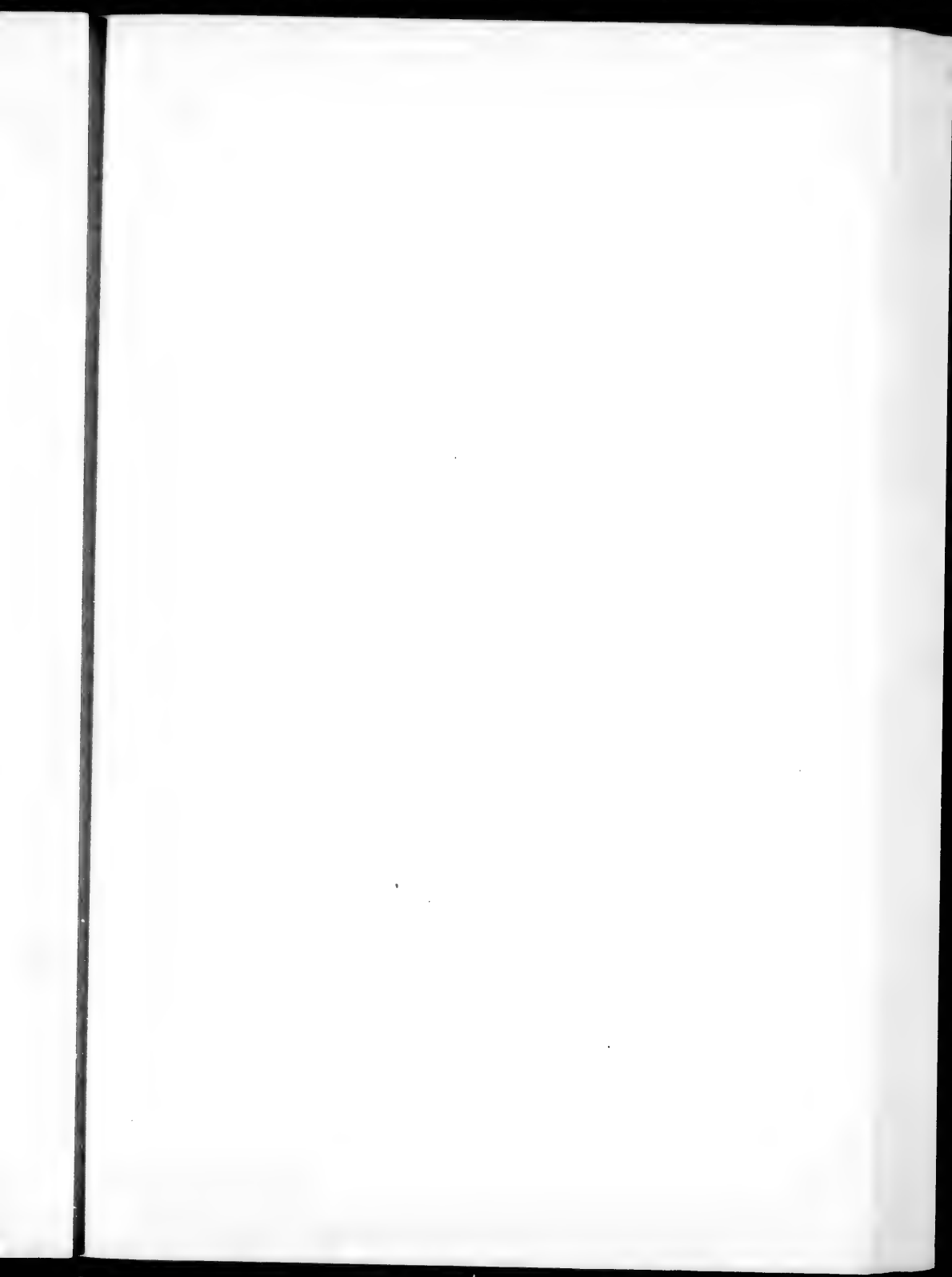
All plants which are common to British North America and Greenland are introduced. The catalogue used is that of Sir Joseph Hooker, in the *Arctic Manual* published in 1875.

In conclusion, I would again state that the present work is by no means final, and would invite the co-operation of botanists in all parts of Canada in the work of adding to our list of species and assisting to define the limits and varietal range of those already known.

OTTAWA, April 1883.

JOHN MACOUN.





3.00 - ... along the ... road ...

(1.) **C.**

Trailing
Quebec (C)
district 1
westward
of the R
Pass.

(2.) **C. V**

River
Scotia, N
Bay, Lake
(Drummond)

(3.) **C. I**

Climbing
source of
Rocky M
(Macoun.)

(4.) **Dou**

On the
Columbia.
British Co

POLYPETALOUS EXOGENS.

I. RANUNCULACEÆ. CROWFOOT FAMILY.

I. CLEMATIS, Linn. (VIRGIN'S BOWER.)

- (1.) **C. verticillaris**, DC. Whorl-leaved Clematis.

Atragene Americana, Sims. Pursh, 384.

Trailing over rocks or climbing over bushes, from the vicinity of Quebec (*Brunet*) throughout Ontario, and extending through the wooded district to the Rocky Mountains in Lat. 56° (on Mount Selwyn), and westward to the Coast Range of British Columbia; also on the foot-hills of the Rocky Mountains near the 49th parallel, and in the Bow River Pass.

- (2.) **C. Virginiana**, Linn. Virginian Clematis.

C. cordata, Pursh, 384.

River banks and in low grounds along streams. Common in Nova Scotia, New Brunswick, Quebec and Ontario, and extending to Thunder Bay, Lake Superior. (*Macoun*.) At the south end of Lake Winnipeg. (*Drummond*.)

- (3.) **C. ligusticifolia**, Nutt.

C. Virginiana, Hook. Fl. I.; 1 in part.

Climbing or trailing over bushes or sand on the sand hills at the source of the Qu'Appelle. (*Macoun*.) Margin of Waterton Lake, Rocky Mountains. (*Dawson*.) Spence's Bridge and Cache Creek, B. C. (*Macoun*.)

- (4.) **Douglasii**, Hook. Douglas's Clematis.

On the west side of the Rocky Mountains, near the sources of the Columbia. (*Douglas*.) It may be looked for in the southern part of British Columbia.

2. ANEMONE, Linn. (WIND FLOWER.)

- (5.) **A. patens**, Linn. var. **Nuttalliana**, Gray. Prairie Anemone or "May-flower."

A. patens, Linn. Hook. Fl. I., 5.

A. Nuttalliana, DC. Richards. in Frankl. Journ., 12.

Pulsatilla patens, Gray. Lawson, Ranunc. Can., 22.

Abundant on dry gravelly soil from the eastern margin of the prairie region through the Rocky Mountains, and westward to the Coast Ranges. It ranges northward beyond the Arctic Circle, and northwesterly into Alaska. (*Rothr. Alask.*)

- (6.) **A. occidentalis**, Watson. Western Anemone.

A. alpina, Hook. Fl. I., 5.

Pulsatilla alpina. Lawson, Ranunc. Can. 23.

Mountains of southern British Columbia and Rocky Mountains, near the 49th parallel, at 6,000 feet altitude. (*Dawson.*) Eastern declivity of the Rocky Mountains, Lat. 52°-55°. (*Drummond.*) Kotzebue Sound. (*Rothr. Alask.*)

- (7.) **A. parviflora**, Michx. Small-flowered Anemone.

A. borealis, Richards. Frankl. Journ., 12.

A. cuneifolia, Juss. Pursh. 386.

Wet rocks along rivers and in mountains. Kotzebue Sound. (*Rothr. Alask.*) Newfoundland. (*McGill Coll. Herb.*) Anticosti. (*Pursh.*) Labrador. (*T. & G.*) Dartmouth River, Gaspé. (*J. Bell.*) Magdalen River, Ste. Anne River and Shickshock Mountains, Gaspé, Q.; Pie River, Lake Superior; Bow River near Morley, N.W.T. (*Macoun.*) East coast of Hudson's Bay. (*R. Bell.*) It becomes abundant northward and extends to the Arctic Sea, Lat. 70°. (*Hooker.*) Kootanie Pass, Rocky Mountains. (*Dawson.*)

- (8.) **A. Baldensis**, Hook.

Arid places on the eastern summits of the Rocky Mountains, Lat. 52°-55°. (*Drummond.*) Watson in his Index to American Botany gives this as a synonym of *A. multifida*, which, however, is scarcely probable. I found a species which I took to be this on Mount Selwyn, in the Peace River Pass, Lat. 56°, but the specimens were lost.

- (9.) **A. nemorosa**, Linn. Wood Anemone.

A. lanceifolia, Pursh. 387.

Thick woods under trees. Not uncommon in New Brunswick.

hemone

of the
to the
e, and

ntains,
astern
tzebue

Rothr.
Pursh.)
gdalen
River,
east of
l and
Rocky

, Lat.
otany
ureely
lwyn,

wick.

13. *Spina ...*

14. *... ..*

(Fowler
through
or Salmon

(10.) A

Salmon

(Dawson

(11.) A

East

Rocky

son, Dr

Sound;

(12.) A

Fence

(Brunet

ward to

(13.) A

Dry,

Grand

to For

(Macoun

species

(14.) A

River

Cat.) F

Woods, &

British C

Sea. (I

(15.) A

Abund

(Campbe

(Fowler's

Mountain

Mackenz

(*Fowler.*) From Gaspé to Dunvegan, (Lat. 56°) on Peace River, and throughout British Columbia to Vancouver Island. (*Macoun.*) Dean or Salmon River, B. C. (*Dawson.*) Local but not rare.

(10.) **A. deltoidea**, Hook.

Salmon River, near Salmon House, Coast Range, B. C., 1876. (*Dawson.*)

(11.) **A. Richardsoni**, Hook. Richardson's Anemone.

A. ranunculoides, var. Richards. Frankl. Journ. 12.

Eastern primitive district; shores of Hudson's Bay; barren ground, Rocky Mountains, from Lat 55°-68°, in wet, mossy ground. (*Richardson, Drummond.*) York Factory. (*R. Bell.*) Ounalaska Island, Kotzebue Sound; Youcon River. (*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*)

(12.) **A. cylindrica**, Gray. Long-fruited Anemone.

Fence corners and borders of woods. Township of Durham, Quebec. (*Brunet.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Belleville and westward to the Rocky Mountains. (*Macoun.*)

(13.) **A. Virginiana**, Linn. Virginian Anemone.

Dry, rocky woods and banks of rivers. Mouth of Upsalquitch River, Grand Falls of St. John. N. B. (*Fowler's Cat.*) Abundant from Gaspé to Fort William and across the plains to the Rocky Mountains (*Macoun.*) Extending northward to Lat. 55°. (*Drummond.*) This species and the preceding are often confounded.

(14.) **A. multifida**, DC. Red Wind-flower.

A. Hudsoniana. Richards. in Frankl. Journ., 13.

River St. John, above Fredericton; Grand Falls, N. B. (*Fowler's Cat.*) From Gaspé to Lake Superior, Pie River to the Lake of the Woods, and across the great plains and northwardly by Peace River to British Columbia. (*Macoun.*) Shores of Hudson's Bay. (*R. Bell.*) Arctic Sea. (*Richardson.*)

(15.) **A. dichotoma**, Linn. Round-headed Anemone.

A. Pennsylvanica, Linn. Hook. Fl. L., 8.

A. acutifolia. Michx. Fl. L., 320.

Abundant along river margins and in low meadows. Truro, N. S. (*Campbell.*) Along St. John River and tributaries; Restigouche, N.B. (*Fowler's Cat.*) Abundant from Gaspé to the valleys of the Rocky Mountains. (*Macoun.*) From Hudson's Bay to the mouth of the Mackenzie and westward to the Pacific. (*Hooker.*)

- (16.) **A. narcissiflora**, Linn. Narcissus-flowered Anemone.

Rocky places. Northwest coast; Alaska. (*Rothr. Alask.*) Will likely be found in British Columbia.

- (17.) **A. Hepatica**, Linn. Liverwort. May Flower.

Hepatica triloba, Chaix. Gray, Manual, 38.

Dry, rich woods. Falmouth and Bridgewater, N. S. (*How & Ball.*) Pictou, N. S., very rare. (*Mackay.*) St. Stephens and Keswick Ridge, N. B. (*Fowler's Cat.*) Rather rare in Quebec from the Isle of Orleans westward. (*Brunet.*) Abundant throughout Ontario. (*Macoun.*) Reported from River Winnipeg by Captain Back, and Rocky Mountains, Lat. 55°, by Drummond. These references are doubtful. (*Macoun.*) Sitka. (*Rothr. Alask.*)

- (18.) **A. acutiloba**, Lawson. May Flower.

Hepatica triloba, var. *acuta*. Pursh, 391.

H. acutiloba, DC. Gray's Manual, 38.

Rich, shady woods. Point Levis. (*Brunet.*) Common around Montreal. (*McGill Coll. Herb.*) Abundant throughout Ontario. (*Macoun.*)

3. THALICTRUM, Tourn. (MEADOW-RUE.)

- (19.) **Thalictrum anemonoides**, Michx. Rue Anemone.

Synedemon thalictroides, Hoffm. Lawson, Ranunc. Can., 31.

Rich, rocky woods. Vicinity of Niagara Falls and Pelee Island, Lake Erie. (*Macoun.*) St. Davids, Niagara District, Ont. (*MacLagan.*) Oaklands, near Hamilton, Ont. (*Logie.*)

- (20.) **T. dioicum**, Linn. Early Meadow-rue.

T. levigatum, Michx. Fl. I., 322.

Rich woods. Keswick Ridge, rare; Flat lands, Restigouche, N. B. (*Fowler's Cat.*) Abundant from Gaspé to the Pacific. (*Macoun.*) North to Lat. 67°. (*Hooker.*)

- (21) **T. purpurascens**, Linn. Purplish Meadow-rue.

T. pubescens, Pursh, 383.

Dry uplands and rocky hills. St. Joachim, Quebec. (*Provancher.*) Vicinity of Belleville and at Heely Falls, Seymour, Ont. (*Macoun.*) Near London, Ont. (*Burgess.*)

.
) Will

& *Ball.*)
Ridge,
Orleans
lacoun.)
Moun-
oubtful.

around
Ontario.

Island,
lagan.)

N. B.
coun.)

cher.)
coun.)

(22.) **T.**

Wet m
Nova Sc
Pacific.
(*McGill*
Richards

(23.) **T.**

Island
Kotzebue
(*Hook. A*

(24.) **T.**

Low, r
Porcupin
B. C. (2
sand hills

(25.) **M.**

On gro
House op
ville, Ont
Vancouver
N.W.T.

(26.) **M.**

Arid se
near Reec
near Lytt

5. RAN

(27.) **R. I**

R.

Growing
couver Isl

(22.) **T. Cornuti**, Linn. Fall Meadow-rue.*T. rugosum*, Pursh, 388.*T. corynellum*, DC. Richards. in Frankl. Journ., 12.

Wet meadows, around springs and along rivulets. Common from Nova Scotia and New Brunswick through the wooded districts to the Pacific. North to Peace River. (*Macoun.*) Coast of Labrador. (*McGill Coll. Herb.*) Anticosti. (*Verrill.*) Newfoundland. (*J. Richardson.*)

(23.) **T. alpinum**, Linn. Alpine Meadow-rue.

Island of Anticosti, 1861. (*Verrill.*) Newfoundland. (*Banks.*) Kotzebue Sound and Port Clarence. (*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*)

(24.) **T. sparsiflorum**, Turcz. Few-flowered Meadow-rue.*T. clavatum*, Hook. Fl. I., 2.

Low, rich alluvial soil. Low ground along the eastern base of the Porcupine Mountains, about Lat. 53°, Man. Macleod's Lake, Lat 55°, B. C. (*Macoun.*) Portage La Loche, a height of land composed of sand hills, Lat. 57°, N. W. T. (*Richardson.*)

4. MYOSURUS, Dill. (MOUSE-TAIL.)(25.) **M. minimus**, Linn. Least Mouse-tail.

On ground subject to overflow and on limestone shingle at the Ferry House opposite Belleville; rocky pastures west of Albert College, Belleville, Ont. Arid spots north of Cypress Hills, N. W. T. Near Victoria, Vancouver Island, B. C. (*Macoun.*) Near Short Creek, Souris River, N.W.T. Tsi Tsut[†] Mountains, B. C. (*Dawson.*)

(26.) **M. aristatus**, Benth. Awned Mouse-tail.

Arid soil, west of the Elbow of the South Saskatchewan, 1879; near Reed Lake, Lat. 50° 30', Long. 107° 20', N. W. T. Abundant near Lytton, B. C. (*Macoun.*)

5. RANUNCULUS, Linn. (CROWFOOT. BUTTERCUP.)(27.) **R. hederaceus**, Linn.*R. aquatilis*, Linn. var. *Lobbii*. Watson's Index, 17.

Growing in a pool by the roadside near Esquimaux Harbor, Vancouver Island, 1875. (*Macoun.*)

- (28). **R. aquatilis**, Linn. var. **trichophyllus**, Chaix. White Water-crowfoot.

R. fluvialis, Pursh, 395.

R. aquatilis var. *capillareus*, DC. Hook. Fl. I., 10.

R. aquatilis var. *brachypus*, Hook. & Arn. Torr & Gray, Fl. I., 658.

Common in stagnant pools and slow-flowing brooks, from Cape Breton (*How.*) to British Columbia. (*Macoun.*) Coppermine River. (*Simpson*) Greenland. (*Hook. Arct. Pl.*)

Var. **stagnatilis**, DC.

R. divaricatus, Gray, Manual, 40.

In stagnant pools from Rat Creek, Manitoba, westward to the mountains. (*Macoun.*)

Var. **cæspitosus**, DC.

Borders of forest lakes. Small lakes, North Hastings, Ont. (*Macoun.*), thence northward and westward. (*Hooker.*)

The first is the common eastern form, and often grows in company with the latter, while the second is the characteristic form of the stagnant pools of the prairies.

- (29.) **R. multifidus**, Pursh. Yellow Water-crowfoot.

R. Purshii, Torr. Hook. Fl. I., 16.

Common in stagnant pools and ditches. Cape Breton Island to the Pacific and northward to near the Arctic Sea. Kotzebue Sound. (*Rothr. Alask.*)

Var. β . Watson's Index. 20.

R. Purshii var. γ . Hook. Fl. I., 15.

R. limosus, Nutt. in Torr & Gray, Fl. I., 20.

In or on the margins of small pools on the great prairies; in the Touchwood Hills, N. W. T. (*Macoun.*) Lakes and marshes about Cumberland House and Slave Lake. (*Richardson.*) Rocky Mountains. (*Drummond.*) In pools near Stuart's Lake, B.C. (*Macoun.*)

Var. γ . **repens**, Watson in King's Rep., 8.

R. Purshii, var. β . Richardson.

In a muddy brook near Flinton, Hastings Co., Ont. Numerous places on the great prairies. (*Macoun.*) Swamps, foot-hills of Rocky Mountains. (*Dawson.*) Bear Lake. (*Richardson.*)

- (30.) **R. alismæfolius**, Geyer. Water-plantain. Spearwort. *Macoun's Cat.*, No. 23.

In inundated places on mud. Southern part of Ontario. (*Goldie.*)

White

58.

from Cape
the River.

the moun-

ings, Ont.

company
the stag-

ad to the
(Rothr.

es; in the
es about
ountains.

umerous
of Rocky

bearwort.

(Goldie.)

Vicinity

Vancouver

(31.) **R.**

Shore

(*Macoun*)

South G

Var. **r**

A

A

A

Abund

Scotia to

Arctic S

persistence

(32.) **R.**

Sea sh

of British

(*How & J*)

Vicinity

Ottawa a

at Beauha

the Arctic

South Gre

Var. **al**

Near th

(*Drummon*)

(33.) **R.**

R.

R.

Dry gro

hills near

near Toron

Ont. (*Se*)

Co., Ont.

Western p

Prairie an

Rocky Mo

mond.)

Vicinity of Port Colborne, Ont. (*McGill Coll. Herb.*) Near Victoria, Vancouver Island. (*Macoun.*)

(31.) **R. flammula**, Linn. var. **intermedius**, Hook.

Shore of Lake Ontario at Presqu' Isle Point and on Toronto Island. (*Macoun.*) On the gravelly banks of rivers to Lat. 69°. (*Richardson.*) South Greenland. (*Hook. Arct. Pl.*)

Var. **reptans**, Meyer. Creeping Crowfoot.

R. reptans, Linn. *Macoun's Cat.*, No. 48.

R. filiformis, Michx. *Fl. I.*, 320.

R. flammula var. *filiformis*, Hook. *Fl. I.*, 11.

Abundant along the gravelly margins of lakes and rivers from Nova Scotia to the Coast Ranges of British Columbia, and northward to the Arctic Sea. (*Macoun.*) Greenland. (*Hook. Arct. Pl.*) This form is very persistent, and roots at almost every joint.

(32.) **R. Cymbalaria**, Pursh. Seaside Crowfoot.

Sea shores and margins of salt ponds in the prairie region and interior of British Columbia. Common in Nova Scotia and New Brunswick. (*How & Fowler.*) Gaspé, Q.; Fort William, Lake Superior. (*Macoun.*) Vicinity of Montreal. (*McGill Coll. Herb.*) On mud flats along the Ottawa at Thurso, Q. (*Fletcher, Fl. Ott.*) Along the Ottawa River at Beauharnois, Q. (*McGill Coll. Herb.*) From Hudson's Bay to near the Arctic Sea in Lat. 63°. (*Richardson.*) Pacific coast. (*Dawson.*) South Greenland. (*Hook. Arct. Pl.*)

Var. **alpinus**, Hook. *Fl. I.*, 11.

Near the summits of the Rocky Mountains, between Lat. 52°-55°. (*Drummond.*)

(33.) **R. rhomboideus**, Goldie. Rhomboid-leaved Crowfoot.

R. oralis, Raf. Hook. *Fl. I.*, 12.

R. brevicaulis, Hook. *Fl. I.*, 13.

Dry ground and sand hills. Near Montreal. (*Dr. Holmes.*) Sand hills near Trenton, and Rice Lake Plains, Ont.; banks of the Humber near Toronto. (*Macoun.*) Lake Simcoe, Ont. (*Goldie.*) Near London, Ont. (*Saunders.*) Sandy plains of the Rivière aux Sables, Lambton Co., Ont. (*Gibson.*) Lake of the Woods and various places on the Western plains. (*Macoun.*) Lake Winnipeg. (*Barnston.*) Red River Prairie and Pembina Mountain. (*Dawson.*) Alpine prairies of the Rocky Mountains and about Carleton House, Lat. 52°-55°. (*Drummond.*)

(34.) **R. affinis**, R. Br. Rough-fruited Crowfoot.*R. arcticus*, Richards. in Frankl. Journ. 13.

Abundant west of Moose Mountain, N.W.T. (*Macoun.*) Lake of the Woods and Trader's Road, north of Woody Mountain, N.W.T. (*Darson.*) From Long. 95° to the western declivity of the Rocky Mountains, Melville Island and shores of the Arctic Sea, between Long. 107°-159°. (*Richardson.*) Barren summits of the Rocky Mountains on the eastern side of the ridge, Lat. 52°-55°, (*Drummond.*) Quesnel, B.C. (*Macoun.*) Greenland. (*Hook. Arct. Pl.*)

Var. **cardiophyllus**, Gray.*R. cardiophyllus*, Hook. Fl. I., 14.

Vicinity of Morley, Bow River; seven miles northwest of Edmonton. (*Macoun.*) In the central prairie and limestone districts to Lat. 55°. Alpine prairies of the Rocky Mountains. (*Drummond.*)

Var. **lelocarpus**, Trautv.

Top of Mount Albert, 4,000 feet altitude, Shickshock Mountains, Gaspé, Q. (*Macoun.*)

(35.) **R. glaberrimus**, Hook. Smooth Crowfoot.

Near Lake La Hache, and above Boston Bar, B.C. (*Macoun.*) Kettle Falls of the Columbia and on the Rocky Mountains, near the limit of perpetual snow. (*Douglas.*)

(36.) **R. fascicularis**, Muhl. Bundle-rooted Buttercup.

Dry, gravelly soil. Kingston Mills, Chippewa and Malden, Ont. (*Mac-lagan.*) Belleville, Trenton, vicinity of Toronto, Niagara Falls, Ont. (*Macoun.*) Common east of London Ont. (*Saunders.*) Hamilton, Ont. (*Logie.*) South end of Lake Winnipeg. (*Richardson.*) Last reference doubtful.

(37.) **R. abortivus**, Linn. Small-flowered Buttercup.

In old pastures and woods quite common. Pieton, N.S. (*McKay.*) Common in New Brunswick. (*Fowler's Cat.*) Anticosti and Newfoundland. (*Verrill.*) Abundant in Quebec and Ontario, extending through the forest region to British Columbia by Peace River. (*Macoun.*)

Var. **micranthus**, Gray, Manual, 42.*R. micranthus*, Nutt. in Torr & Gray, Fl. I., 18.

Rocky shores. Grand Etang, Gaspé, Q. Along the canal at the Sault

f the
V. T.
ocky
reen
oun-
ond.)

mon-
Lat.

ains,

ettle
nit of

Mac-
Ont.
Ont.
ence

(Kay.)
New-
ding
liver.

Sault

Ste. M
(*Agass*

(38.) **R**

In di
N. B.
Mount
Very co
River t
67°. (

(39.) **R**

Rich,
Shaded
Saint Jo
tain and
of Ottaw
dant we
Woods.

(40.) **R**

Labra
Rocky I
shore of
mine Riv
Lat. 56°.
feet altit
Greenlan

(41.) **R.**

Mossy
the Arcti
the Rock
along the
at Edmon
in numero
Islands in
Greenland
Macmorin
swamp w
Thunder I

Ste. Marie. Quesnel, B.C. (*Macoun*.) North shore of Lake Superior. (*Agassiz*.) Rare.

(38.) **R. scoloratus**, Linn. Noxious Buttercup.

In ditches and muddy pools. St. Stephen, Shediac and River Charles N. B. (*Fowler's Cat.*) Gaspé and Point Lévis, Q. (*Macoun*.) Belœil Mountain, Q. (*J. Bell*.) Vicinity of Montreal. (*McGill Coll. Herb.*) Very common in Ontario and in ponds on the Great Plains by Peace River to British Columbia. (*Macoun*.) Slave Lake and North to Lat. 67°. (*Richardson*.)

(39.) **R. recurvatus**, Poir. Hooked Buttercup.

Rich, damp woods. Labrador. (*Pursh*.) Pietou, N.S. (*McKay*.) Shaded brook at Bass River, Kent Co., N.B. (*Fowler's Cat.*) Beaumont, Saint Joachim, Pied du Cap Tourmonte, Q. (*Brunet*.) Montreal Mountain and Eastern Townships, frequent. (*McGill Coll. Herb.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Prescott, Ont. (*Billings*.) More abundant westward throughout Ontario and disappearing at the Lake of the Woods. (*Macoun*.)

(40.) **R. pygmæus**, Wahl. Diminutive Crowfoot.

R. Sabini, R. Br. Hook. Fl. I., 17.

Labrador. (*Pursh*.) Moist, grassy places on the higher parts of the Rocky Mountains, in Lat. 55°. (*Drummond*.) Melville Island and shore of the Arctic Sea from Long. 170° to the mouth of the Coppermine River. (*Richardson*.) Top of Mount Selwyn, Peace River Pass, Lat. 56°. (*Macoun*.) Rocky Mountains near the 49th parallel, 6,000 feet altitude. (*Darson*.) Kotzebue Sound. (*Rothr. Alask.*) West Greenland. (*Hook. Arct. Pl.*)

(41.) **R. Lapponicus**, Linn. Lapland Crowfoot.

Mossy woods in the eastern and central districts and from Lat 50° to the Arctic Sea. (*Richardson*.) Mountain swamps, eastern declivity of the Rocky Mountains, Lat. 52°-57°. (*Drummond*.) Mossy swamps along the base of the Porcupine Mountains, Man., swamp near St. Albert at Edmonton, N. W. T., swamps along Little Slave Lake, N. W. T., and in numerous swamps in northern British Columbia. (*Macoun*.) Whale Islands in the Arctic Sea. (*Ross*.) Kotzebue Sound. (*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*) In the spring of 1881 the Rev. J. K. Macmoline pointed out to me a few specimens growing in a little swamp within the limits of the town of Prince Arthur's Landing, Thunder Bay; this seems to be its most southern limit.

(42.) **R. hyperboreus**, Rottb. Northern Crowfoot.

Marshes in the Rocky Mountains, Lat. 52° – 57° . (*Drummond.*) Arctic Islands. (*Parry.*) Norton Sound to Wainright Inlet. (*Rothr. Alask.*) Melville Island. (*Dr. Walker.*) On both sides of Davis Strait and Baffin's Bay. Greenland generally. (*Hook. Arct. Pl.*)

(43.) **R. Hookeri**, Regel. Hooker's Crowfoot.

R. pedatifidus, Hook. Fl. I., 18.

Barren summits of the Rocky Mountains, on the eastern side of the ridge. Lat. 52° – 55° . (*Drummond.*)

(44.) **R. nivalis**, Linn. Mountain Crowfoot.

R. frigidus, Willd. Hook. Fl. I., 18.

Lofty parts of the Rocky Mountains, Lat. 55° . (*Drummond.*) Copper Mountains and Arctic Sea coast, in muddy pools which become dry during summer, Long. 110° . (*Richardson.*) Arctic coast near the termination of the Rocky Mountains, Long. 140° . (*Franklin.*) Labrador. (*Torr. & Gray.*) Assistance Bay, south end of Cornwallis Island. (*Dr. Sutherland.*) Kotzebue Sound. (*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*)

Var. **Eschscholtzii**, Watson.

R. Eschscholtzii, Schlecht. Hook. Fl. I., 18.

Near the region of perpetual snow, on the borders of streams on the Rocky Mountains, Lat. 52° – 56° . (*Drummond.*) Top of Mount Selwyn, Peace River Pass, Lat. 56° . (*Macoun.*) Rocky Mountains near the 49th parallel; and the Tsi Tsutl Mountains and Coast Range, B. C. (*Dawson.*) Kotzebue Sound to Cape Lisburne. (*Rothr. Alask.*)

Var. **sulphureus**, Wahl.

R. sulphureus, Solander. Hook. Fl. I., 17.

Repulse Bay. (*Dr. Rae.*) Arctic Islands and Greenland. (*Hooker.*)

(44 b.) **R. glacialis**, Linn.

R. Chamissonis, Schlecht.

Fury Beach, Elwyn Inlet, Gulf of Boothia. (*Capt. A. H. Markham.*) Greenland. (*Hook. Arct. Pl.*)

(45.) **R. acris**, Linn. Meadow Buttercup.

Introduced. Very abundant in every part of Ontario and Quebec, and particularly so about the Sault Ste. Marie and Garden Rivers. Quite common in Nova Scotia, and also becoming common in the eastern part of Manitoba. (*Macoun.*) Newfoundland. (*J. Bell.*) Too abun-

ic
(.)
ad

he

op-
dry
the
La-
illis
een-

the
yn,
the
B. C.

(ker.)

am.)

ebec,
quite
stern
bun-

dant
land.
and p

(46.)

Intr
Lond

(47.)

Moi
Wet p
Rivière
of Ott
pewa,
countr
Pacific

(48.)

Intr
species
and th
Montre
collecte
Quebec
(*Macou*

Var.

Overt
Pictou,
Cat.) M
uncomm
Montrea
(*Fletcher*
(*Saunders*
Chippew
from Ma
rivers fr
River, La

dant in damp fields, New Brunswick. (*Fowler's Cat.*) South Greenland. (*Hook. Arct. Pl.*) It is a pernicious weed in all damp meadows and pastures in the eastern provinces and the western part of Ontario.

(46.) **R. bulbosus**, Linn. Bulbous-rooted Crowfoot.

Introduced. Pastures near Barrie, Ont. (*Spotten.*) Roadsides near London, Ont. (*Burgess.*) Vicinity of Hamilton, Ont. (*Buchan.*)

(47.) **R. Pennsylvanicus**, Linn. Bristly Buttercup.

Moist meadows and borders of streams. Pictou, N. S. (*McKay.*) Wet places, rather rare, in New Brunswick. (*Fowler's Cat.*) Gaspé, Rivière du Loup, District of Montreal, and River Rouge, Q.; vicinity of Ottawa, Prescott, various places throughout central Ontario, Chippewa, St. Catharines, Toronto, London, Ont.; westward in the wooded country to the Rocky Mountains and through British Columbia to the Pacific. (*Macoun.*) North to beyond the Arctic circle. (*Hooker.*)

(48.) **R. repens**, Linn. Creeping Crowfoot.

R. tomentosus, Poir. Torr. & Gray Fl. I., 23.

Introduced. I prefer, as there is much confusion regarding this species, to place all references to the introduced form under this name, and the native forms as varieties. Quite common in the vicinity of Montreal. (*McGill Coll. Herb.*) Mr. Ami, of the Geological Survey, collected a small specimen of the true *R. repens* in the vicinity of Quebec, and I detected a few in a field at Little Métis, Q., 1882. (*Macoun.*)

Var. **hispidus**, Torr. & Gray.

R. hispidus, Michx. Hook. Fl. L., 19.

R. Marilandicus, Poir. Pursh. 394.

R. Schlechtendahlii, Hook. Fl. I., 21.

R. repens, var. *Marilandicus*, Torr. & Gray, Fl. I., 31.

Overflowed intervalles along streams and in damp shady places. Pictou, N. S. (*McKay.*) Abundant in damp shady places. (*Fowler's Cat.*) Magdalen River, Gaspé, Q. (*Macoun.*) Rivière du Loup, Q., not uncommon. (*Thomas.*) Common near Quebec. (*Brunet.*) Vicinity of Montreal and Newfoundland. (*McGill Coll. Herb.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Prescott, Ont. (*Billings.*) Common at London, Ont. (*Saunders.*) Common at Hamilton, Ont. (*Logie.*) Galt, Ont. (*Buchan.*) Chippewa and Malden, Ont. (*MacLagan.*) Cold Creek, Ont.; common from Manitoba westward, (an upright form). (*Macoun.*) Banks of rivers from the Eastern Provinces to near the mouth of the Mackenzie River, Lat. 67°, and from the shores of Hudson's Bay to the Pacific.

(*Hooker.*) Eastern declivity of the Rocky Mountains, Lat. 52° - 55° , in rich soils; plentiful. (*Drummond.*)

Var. **nitidus**, Chapman, Fl. S. States, 8.

(?) *R. septentrionalis*, Poir. Torr. & Gray, Fl. I., 25.

R. nitidus, Muhl. Hook. Fl. I., 20.

Canada. (*Mrs. Percival.*) A form which is probably referable to this variety has been found at London, Ont., (*Burgess.*) and in the vicinity of Ottawa. (*Fletcher.*) (*Lower Canada's Bay.*)

Further information regarding the above forms is much needed.

(49.) **R. Nelsoni**, Gray. Nelson's Crowfoot.

R. recurvatus, var. *Nelsoni*, DC. Hook. Fl. I., 20.

R. occidentalis, Torr. & Gray, Fl. I., 22; in part.

This species seems confined to the West Coast, as the only points where detected are Vancouver Island near Victoria. (*Macoun.*) and Queen Charlotte Islands. (*Dawson.*) Unalashka. (*Hooker.*) Sitka. (*Rothr. Alask.*)

Var. **tenellus**, Gray.

R. tenellus, Torr. & Gray, Fl. I., 23.

Vancouver Island; near Yale, and along the waggon road from Clinton to Quesnel, B.C. (*Macoun.*)

(50.) **R. Californicus**, Benth.

R. acris var. β , Torr & Gray, Fl. I., 21.

R. acris, Linn. Macoun, Report Geol. Survey, 1875.

Abundant in the vicinity of Victoria, Vancouver Island, and doubtless quite common. (*Macoun.*) Queen Charlotte Islands. (*Dawson.*)

(51) **R. occidentalis**, Nutt. Western Crowfoot.

R. hispidus, Hook. Fl. I., 19; in part.

Queen Charlotte Islands. (*Dawson.*) Sitka. (*Torr. & Gray.*)

Doubtful Species.

(52.) **R. orthorhynchus**, Hook.

Will likely be found in Southern British Columbia, or along the coast.

(53.) **R. Pallasii**, Schlecht.

On the Western shores of extreme Arctic America beyond Behring's Straits. (*Hooker.*) Kotzebue Sound. (*Rothr. Alask.*)

5°,

this
nity

oints
and
itka.

from

oubt-
son.)

Mount Victoria S.I.

the

ing's

(54.)

In s
son.)
in No
Abund
forest
Sea, a
of the
Var

Unal
May p
Var.

Banl
B. C.

(55.)

Nort
Mounta
Coast E

(56.)

Creep
tricts f
Flowing
road, N.
River, m

(57.)

Low c
and No

6. CALTHA, Linn. (MARSH MARIGOLD.)**(54.) C. palustris, Linn. Spring Cowslip.**

C. arctica, R. Br. Hook. Fl. I., 22.

In swamps and marshy meadows. Straits of Belle Isle. (*J. Richardson.*) Mingan and Anticosti. (*Verrill.*) Nova Scotia. (*Ball.*) Common in New Brunswick. (*Fowler's Cat.*) Throughout Quebec. (*Brunet.*) Abundant in all parts of Ontario, and extending across through the forest country to the Rocky Mountains. (*Macoun.*) Coast of the Arctic Sea, and Melville Island. (*Hooker.*) Richard's Island, at the mouth of the Mackenzie River. (*Pullen.*)

Var. Sibirica, Regel.

C. integerrima, Pursh. 390.

C. asarifolia, DC. Hook. Fl. I., 22.

C. palustris, var. *parussifolia*, Torr. & Gray Fl. I., 26. Also vars. *flabellifolia* and *integerrima*, Torr. & Gray, Fl. I., 26.

Unalashka and Aleutian Isles. (*Hooker.*) Alaska (*Rothr. Alask.*) May probably be found in Northern British Columbia.

Var. minima, Regel.

C. biflora, DC. Hook., Fl. I., 22.

Banks' Isles, on the northwest coast. (*Menzies.*) Tsi Tsutl Mountains, B. C. (*Dawson.*)

(55.) C. leptosepala, DC.

Northwest coast of America. (*Menzies.*) Alpine swamps in the Rocky Mountains, Lat. 52°-55°. (*Dgunmond.*) Cariboo Mountains, and Coast Range, B.C. (*Dawson.*) Sitka. (*Rothr. Alask.*)

(56.) C. natans, Pall. Floating Marsh-marigold.

Creeping on the surface of deep sphagnous bogs, in the central districts from the Eastern Provinces (?) to Lat. 60°, rare. (*Hooker.*) Flowing stream twenty miles west of Edmonton, on the Lac La Nun road, N.W.T., 1872; Peace River tributaries, near Fort St. John; Methy River, near Methy Portage, Lat. 57°, N.W.T. (*Macoun.*)

7. COPTIS, Salisb. (GOLD THREAD.)**(57.) C. trifolia, Salisb. Three-leaved Gold-thread.**

Low damp woods and cedar swamps. Abundant from Newfoundland and Nova Scotia to the Rocky Mountains. Flowering according to

situation, from early in May in the more southern regions to September in the mountains. Labrador and north to Lat. 58°. (*Hooker.*) Sitka (*Rothr. Alaska.*) Greenland. (*Hook. Arct. Pl.*)

(58.) **C. asplenifolia**, Salisb. Spleen-wort-leaved Gold-thrill.

Rich woods northwest coast. (*Menzies.*) Queen Charlotte Islands. (*Dawson.*) Rich woods New Westminster, B. C. (*Macoun.*) Sitka. (*Rothr. Alaska.*)

8. **AQUILECIA**, Tourn. (COLUMBINE.)

(59.) **A. Canadensis**, Linn. Wild Columbine.

Rocky hill sides and open woods. Northwest Arm Halifax, N. S. (*Lawson.*) Falls of Montmorenci, Point Levis, Isle of Orleans, Q. (*Brunet.*) Gneiss rocks, Sixteen-Mile Lake, River Rouge, Q. (*D'Urban.*) Montreal Mountain. (*McGill Coll. Herb.*) Common throughout Ontario and up the Kaministiquia River. (*Macoun.*) Near Emerson, Man. (*Dawson.*) Lake Winnipeg. (*Back.*) Saskatchewan Plains. (*Bourgeau.*)

(60.) **A. formosa**, Fisch. Western Columbine.

A. Canadensis, Hook. Fl. I., 26; in part.

A. Canadensis var. *formosa*, Watson. Macoun's Cat., No. 60.

Rich grounds and rocky slopes. A most beautiful species. Vancouver Island; Queen Charlotte Islands; mainland of British Columbia from the valley of the Fraser to Lat. 56°, western slopes of Rocky Mountains. (*Macoun and Dawson.*) Sitka. (*Rothr. Alaska.*)

(61.) **A. brevistyla**, Hook. Short-styled Columbine.

A. vulgaris, (?) Richards. in Frankl. Journ. 13.

Western parts of Canada. (*Drummond.*) As far north as Bear Lake. (*Richardson.*) Clear Water River, below Methy Portage, N.W.T.; "Lake Nipigon, chiefly near Lake Superior." (*Governor McTavish.*) Rocky Mountains. (*Bourgeau.*) Telegraph Trail, B.C.; Peace River, at the Rocky Mountain Portage, Lat. 56°. (*Macoun.*)

(62.) **A. vulgaris**, Linn. Common Columbine.

Introduced.—Abundant in the grounds at the Princes Lodge, Halifax Co., and in spots along the Railway Line, and Windsor Road, N.S. (*Lawson.*) Pictou, N.S. (*McKay.*) Escaped from gardens near St. John, N.B. (*Fowler's Cat.*) Roadsides, Bolton, Q. Near Charlesburg, Q. (*McGill Coll. Herb.*)

number
sitka

lands.
sitka.

U. S.
Q.
ban.)
tario
Man.
Bour-

Van-
mbia
ocky

ake.
Lake
ocky
the

lifax
N.S.
near
rles-

Ammonia ... (Cassidy)

(63.)

Rocky
thick
Rocky
that th
to the

(64) T

Alpin
Lat. 52°
Pass ; C
tains of

(65.) D

Escap
Ont. (C
ville, On

(66.) D

Rocky
Morley,
northwan
Rocky M
B. C. (I
(Governor

(67.) D

Northw
and many
and Dawso

- (63.) **A. flavescens**, Watson. Yellow-flowered Columbine.

Rocky Mountains, Kootanie Pass. (*Dawson*.) Bow River Pass, in thickets and at the base of the cliffs of the eastern range. (*Macoun*.) Rocky Mountains. (*Bourgeau*.) Later investigations seem to prove that this plant is a form of *A. cerulea*, a species not uncommon more to the south in the Rocky Mountains.

9. TROLLIUS, Linn. (GLOBE FLOWER.)

- (64) **T. laxus**, Salisb. Spreading Globe-flower.

T. Americanus, Muhl. Hook. Fl. I., 23.

T. patula, Salisb. Macoun's Cat., No. 57.

Alpine rivulets on the eastern declivity of the Rocky Mountains Lat. 52°-55°. (*Drummond*.) Top of the Rocky Mountains, Kootanie Pass; Coldwater River, Cascade Mountains, B. C. (*Dawson*.) Mountains of Cariboo. (*Macoun*.) (*Comber*.)

10. DELPHINIUM, Tourn. (LARKSPUR.)

- (65.) **D. Consolida**, Linn. Field Larkspur.

Escaped from gardens. Banks of the St. Lawrence, west of Prescott, Ont. (*Billings*.) Gardens, waste places, and wheat fields near Belleville, Ont. (*Macoun*.) Vicinity of Hamilton, Ont. (*Buchan*.)

- (66.) **D. scopulorum**, Gray. Rocky Mountain Larkspur.

D. exaltatum, Hook. Fl. I., 25.

D. elatum, L. var. *occidentale*, Watson. Macoun's Cat. No. 65.

Rocky Mountains, Lat. 52°-55°. (*Drummond*.) Abundant near Morley, Bow River; on the Saskatchewan, as far east as Carleton, and northward to the Peace River, Lat. 56°. (*Macoun*.) Saskatchewan and Rocky Mountains. (*Bourgeau*.) Iroquois Creek, near Fort McLeod, B. C. (*Dawson*.) Youcon River, Alaska; Clear Water Lake, N. W. T. (*Governor McTavish*.)

- (67.) **D. Menziesii**, DC. Menzies' Larkspur.

D. pauciflorum, Nutt. Torr. & Gray, Fl. I. 33.

Northwest coast of America. (*Menzies*.) Abundant on Cedar Hill and many other localities near Victoria, Vancouver Island. (*Macoun and Dawson*.) Kotzebue Sound to Cape Lisburne. (*Poehr. Alaska*.)

(68.) **D. variegatum**, Torr. & Gray.*D. decorum*, Fisch. & Mey. Macoun's Cat., No. 67.

Under cliffs near the waggon road, Yale, B. C. (*Macoun*.) This species has also been found in the same vicinity by Mr. A. J. Hill of the C. P. R. staff.

(69.) **D. azureum**, Michx. Prairie Larkspur.*D. virens*, Nutt. Torr. & Gray, Fl. I., 32.

South of Lake Winnipeg. (*Dr. Houghton*.) Plains near ! Mountain, N.W.T. (*Dawson*.) Dry slopes Cypress Hills, N.W.T. (*Macoun*.) West of Rocky Mountains between Fort Youcon and Lapierre's House, Alaska; also Fort Youcon. (*Gov. McTavish, vide Dawson*.)

II. ACONITUM, Tourn. (MONKSHOOD.)(70.) **A. Fischeri**, Reich. Western Aconite.*A. nasutum*, Hook. Fl. I., 26.*A. Columbianum*, Nutt. Torr. & Gray., Fl. I., 34*A. nasutum*, Fisch. Macoun's Cat., No. 71.

Will likely be found on the west coast. (*Macoun*.)

(71.) **A. Napellus**, L. var. **delphinifolium**, Seringe. Mountain Monkshood.*A. delphinifolium*, DC. Lawson Ranunc. Can. 49.*A. Napellus*, Linn. Macoun's Cat., No. 70.

Sledge Island on the west coast of America. (*Menzies*.) Moist mountain prairies, in the Rocky Mountains, Lat. 52°-56°. (*Drummond*.) Youcon River, near the Arctic circle, also between Fort Youcon and Lapierre's House, west side of Rocky Mountains. (*Hardesty & McTavish*.) Misinechinca River near Pine River Pass, Rocky Mountains. (*Dawson*.) Woods between McLeod's Lake and Stuart Lake, B.C. (*Macoun*.) Between Point Barrow and Mackenzie River. (*Rothr. Alask.*)

12. TRAUTVETTERIA, Fisch. (FALSE BUG BANE.)(72.) **T. palmata**, var. **occidentalis**, Gray.*T. grandis*, Nutt. in Torr. & Gray, Fl. I., 37.*T. occidentale*, Gray. Macoun's Cat., Nos. 22 and 23.*Actæa palmata*. Hook. Fl. I., 26.

Northwest coast. (*Menzies*.) Rich woods on the Lower Fraser, British Columbia, a single specimen obtained in 1872. (*Macoun*.)

This
Till of

Moun-
tain.)
erre's

mountain

Moist
Drum-
Fort
Mountains.
Pass,
and
Kenzie

E.)

Fraser,
)

Seven (1888)

(73.) **A**

Rich
Anticos
Quebec
Range

(74.) **A**

Comm
Rocky
plant.

Var. **2**

This is
Washing
the easte

(75.) **C.**

Rich w
Ont. (*D*
Ontario.

(75 b.)

Ac
This sp
We know

(76.) **H.**

Rich, sl

13. ACTÆA, Linn. (BANEERRY.)

- (73.)
- A. alba**
- , Bigelow. White Cohosh.

A. spicata, var. *alba*, Linn. Michx. Fl. I., 308.*A. Americana*, var. *a.* Pursh, 306.

Rich woods and low flats along streams. Nova Scotia. (*Dr. How.*)
 Anticosti. (*Verrill.*) New Brunswick. (*Fowler's Cat.*) Throughout
 Quebec and Ontario, and through the wooded country to the Coast
 Range in British Columbia.

- (74.)
- A. spicata**
- , Linn. var.
- rubra**
- , Ait. Red Cohosh.

A. rubra, Willd. Hook. Fl. I., 28.*A. brachypetala*, var. β . Richards. in Frankl. Journ., 12.*A. Americana*, β . Pursh. 366.

Common in rich woods from Nova Scotia and New Brunswick to the
 Rocky Mountains and north to Lat. 60°. It is exclusively a forest
 plant. Near Emerson, Manitoba. (*Burgess.*)

Var. **arguta**, Torrey.*A. arguta*, Nutt. in Torr. & Gray, Fl. I., 36. Macconn's Cat., No. 73.

This is the British Columbian form, and extends in rich woods from
 Washington Territory to Alaska. It is much taller and stouter than
 the eastern form.

14. CIMICIFUGA, Linn. (SNAKEROOT.)

- (75.)
- C. racemosa**
- , Nutt. Black Snakeroot.

Actæa racemosa, Linn. Hook. Fl. I., 27.

Rich woods, Cayuga, Grand River, Ont. (*MacLagan.*) Norfolk Co.,
 Ont. (*Dr. Nichol.*) Apparently rare in the southwestern part of
 Ontario.

Doubtful Species.

- (75 b.)
- C. elata**
- , Nutt.

Actæa cimicifuga. Hook. Fl. I., 26.

This species is mentioned in Hooker, on the authority of Pursh.
 We know nothing of it.

15. HYDRASTIS, Linn. (YELLOW ROOT.)

- (76.)
- H. Canadensis**
- , Linn. Yellow Puccoon.

Rich, shady woods. Mirvin's Woods, Prescott, Ont. (*Billings.*)

Malden, Ont. (*MacLagan*.) Township of Williams, Ont. (*Saunders*.) County of Norfolk, Ont. (*Dr. Nichol*.) It seems wholly confined to the western peninsula of Ontario.

16. *PÆONIA*, Linn. (PEONY.)

(77.) *P. Brownii*, Dougl. Western Peony.

P. Californica, Nutt. in Torr. & Gray Fl. I., 41.

Near the confines of perpetual snow, on the sub-alpine range of Mount Hood, Northwest Coast, 1826. (*Douglas*.) Vancouver Island. (*Bot. of California*, I., 13.)

II. MAGNOLIACEÆ. MAGNOLIA FAMILY.

17. *LIRIODENDRON*, Linn. (TULIP TREE.)

(78.) *L. Tulipifera*, Linn. White-wood.

In rich soil throughout the western peninsula of Ontario, from Hamilton (*Logie*) to the Township of Tuckersmith, Huron Co. (*Gibson*.) A noble tree in the thick forest west of St. Thomas, and a beautiful object when covered with its large, tulip-shaped flowers after the middle of June. Cultivated in Prince Edward Co. Flowers freely.

18. *MAGNOLIA*, Linn. (MAGNOLIA.)

(79.) *M. acuminata*, Linn. Cucumber tree.

At the Falls of Niagara. (*Provancher*.) This tree is also introduced in Prince Edward County, Ont., and flowers regularly.

III. ANONACEÆ. CUSTARD APPLE FAMILY.

19. *ASIMINA*, Adans. (AMERICAN PAPAW.)

(80.) *A. triloba*, Dunal. Common Papaw.

Porcelia triloba, Persoon. Pursh, 383.

Uvaria triloba, Torr. & Gray, Fl. I., 45.

Rich low woods near the railway below Queenston Heights. Very

ders.)
to the

age of
island.

from
n Co.
and a
after
owers

duced

Very

81. One abundant on Snake Island opposite Vancouver with a previous
 of April 1882.
 - A variety with corollas of different colors, from Parliament
 and on other islands.

abundant
 between
 Erie, but

(81.) **M.**
 Low,
 Ottawa C.
 Near Em

(82.) **B.**
 Escape
 land. (A
 Hamilton
 County, C

(83.) **B.**
 B.
 B.
 This is
 side of t
 Abundant
 to Stuart's

(84.) **B. A.**
 B.
 B.
 Near to
 Abundant
 Fraser as

(85.) **B. r.**
 Common
 same rang

abundant on Point Pelee and in the townships bordering Lake Erie, between that point and Amherstburgh. Doubtless not rare along Lake Erie, but not reported. (*Macoun.*)

IV. MENISPERMACEÆ. MOONSEED FAMILY.

20. MENISPERMUM, Linn. (MOONSEED.)

- (81.) **M. Canadense**, Linn. Canada Moonseed.

Low, rich woods along streams. Ile Jésus, Montreal. (*Brunet.*) Ottawa Co., Q. (*McGill Coll. Herb.*) Abundant in Ontario. (*Macoun.*) Near Emerson, Man. (*Dawson.*) Lake Winnipeg. (*Bourgeau.*)

V. BERBERIDACEÆ. BARBERRY FAMILY.

21. BERBERIS, Linn. (BARBERRY.)

- (82.) **B. vulgaris**, Linn. Common Barberry.

Escaped from gardens. New Brunswick. (*Fowler's Cat.*) Newfoundland. (*Morrison.*) Point Levis, near Quebec. (*Brunet.*) Vicinity of Hamilton, Ont. (*Logie.*) Borders of the Oak Hill Pond, Hastings County, Ont. (*Macoun.*)

- (83.) **B. repens**, Lindl. Rocky Mountain Grape.

B. Aquifolium and *B. nervosa*, Pursh, 219.

B. Aquifolium, Pursh. Dawson Bound. Rep., 352.

This is the Rocky Mountain species, and has been found at the east side of the Rocky Mountains, in the Kootanie Pass. (*Dawson.*) Abundant on the mainland of British Columbia, and extending north to Stuart's Lake, Lat. 55°. (*Macoun.*)

- (84.) **B. Aquifolium**, Pursh. 4. Oregon Grape.

B. pinnata, Ker. Hook. Fl. I., 28.

B. Aquifolium, vars. β & γ , Torr. & Gray, Fl. I., 50.

Near to the west coast Lat. 40°-49°. (*Menzies.*) Nootka. (*Nelson.*) Abundant in the vicinity of Victoria, Vancouver Island and up the Fraser as far as Yale. (*Macoun.*)

- (85.) **B. nervosa**, Pursh.

Common in shady pine forests on the coast of the Pacific, having the same range, from north to south as *B. Aquifolium*, but it is not found

east of the forests on the coast. (*Douglas*.) On Cedar Hill a few miles from Victoria, Vancouver Island, 1875; also in thickets on the foot hills at Yale. (*Macoun*.)

22. CAULOPHYLLUM, Michx. (BLUE COHOSH.)

(86.) **C. thalictroides**, Michx. Papoose root.

Leontice thalictroides, L. Hook. Fl. I., 29.

Gilmour's Woods in the vicinity of Quebec. (*Brunet*.) Vicinity of Montreal. (*McGill Coll. Herb.*) Found at Nashwaaks, N.B., 1881. (*Moser*.) Low, rich woods throughout Ontario as far west as Owen Sound. (*Macoun*.)

23. JEFFERSONIA, Barton. (TWIN LEAF.)

(87.) **J. diphylla**, Persoon. Rheumatism Root.

J. Bartonis, Michx. Fl. I., 237.

Woods and fence corners in rich soil. Rare, Point Peter, and near Consecon, Prince Edward Co., Ont. (*Macoun*.) Vicinity of Napanee, Ont. (*Rev. J. Scott*.) Banks of the Thames and at Cove near London, Ont. (*Saunders*.)

24. PODOPHYLLUM, Linn. (MANDRAKE.)

(88.) **P. peltatum**, Linn. May apple.

Abundant in rich soil in open woods throughout Ontario. (*Macoun*.) Montreal Mountain. (*Brunet*.)

25. ACHLYS, Hook. (MAY APPLE.)

(89.) **A. triphylla**, DC. Western May-apple.

Northwest coast of America. (*Menzies*.) Quite common in rich soil near Victoria, Vancouver Island, 1875. (*Macoun*.)

26. VANCOUVERIA, Morr. & Decais. (BARREN-WORT)

(90.) **V. hexandra**, Morr. & Decais. Barren-wort.

Epimedium hexandrum, Hook. Fl. I., 30.

Northwest coast of America. (*Menzies*.) Vancouver Island. (*Bot. of California*, I., 15.)

few
n the

)

inity
1881.
Owen

near
anee,
ndon,

coun.)

h soil

DRT)

(Bot.

Handwritten text, likely bleed-through from the reverse side of the page.

(91.) **B.**

Rocky
ton, N.
Abundant
in lakes
Rainy L.

92.) **N.**

Report
month of

(93.) **N.**

Found
muddy on
Without
marshes
London, C
guished fr
rhizomes.
N. odorata
rivers.

(94.) **N.**

M.

Vicinity
Ponds and
(Fowler's C
ing westw

VI. NYMPHÆACEÆ. WATER-LILY FAMILY.

27. **BRASENIA**, Schreber. (WATER-SHIELD.)

- (91.)
- B. peltata**
- , Pursh.

Hydropeltis purpurea, Michx. Hook. Fl. L., 31.

Rocky Lake, N.S. (*Lawson*.) Grand Lake, St. Stephen, Fredericton, N. B. (*Vroom. Hay*.) Point St. Charles, Montreal. (*Brunet*.) Abundant in lakes and ponds, River Rouge, Q. (*D'Urban*.) Abundant in lakes and slow streams throughout the northern counties of Ontario; Rainy Lake, and Lake of the Woods.

28. **NELUMBIUM**, Juss. (NELUMBO.)

- (92.)
- N. luteum**
- , Willd. Water Chinquepin.

Cyamus pentapetalus, Pursh., 378.

Reported from Canadian waters in the Detroit River and near the mouth of the Welland Canal. Should be looked for by collectors.

29. **NYMPHÆA**, Tourn. (WATER-NYMPH.)

- (93.)
- N. tuberosa**
- , Paine. Tuber-bearing Water-lily.

Found in all the marshes along the Bay of Quinte, and abundant in muddy or marshy flats along Lake Ontario, from Presqu'Île eastward. Without doubt this is the Water Lily of Burlington Bay, and of the marshes along Lakes Erie and Huron. It has been reported from London, Ont. (*Burgess*), and Ottawa. (*Fletcher*.) It is easily distinguished from *N. odorata* by its scentless flowers and tuber-bearing rhizomes. This is really the Water-lily of the Great Lakes as the true *N. odorata* seems to be confined to the northern waters, both lakes and rivers.

- (94.)
- N. odorata**
- , Ait. Sweet-scented Water-lily.

M. alba, Walt. Michx. Fl. L., 311.

Vicinity of Halifax and Pictou, Nova Scotia. (*Lawson & McKay*.) Ponds and lakes, St. John's County; Grand Lake, Queen's County, N.B. (*Forster's Cat*.) Abundant throughout Quebec and Ontario and extending westward to the Lake of the Woods.

Var. **minor**, Sims. Lesser Water-lily.

N. odorata, var. *rosea*. Pursh, 369.

N. minor, DC. Hook. Fl. L., 32.

In a small lake southeast of Marmora Village, Hastings, Co., Ont.; South Lake, Township of Snowdon, Peterboro' Co., Ont. Rare. Easily known by its very small flowers and leaves.

30. NUPHAR, Smith. (YELLOW POND-LILY.)

(95.) **N. advena**, Ait. Common Yellow Water-lily.

Nymphaea advena, Michx. Fl. L., 311.

Nuphar Americana, Provancher, Fl. Can., 28.

Very abundant in ponds, ditches and rivers from Nova Scotia and New Brunswick, through Quebec and Ontario and westward by the forest country to the Rocky Mountains, also on the Athabasca River north of Lat. 57°. Caribou, Labrador. (*Butler.*) West Coast of Newfoundland. (*J. Bell.*)

(96.) **N. polysepalum**, Engelm. Western Pond-lily.

Swamp Creek, on the height of land between the Fraser and McLeod's River, northern British Columbia, 1875. (*Macoun.*) Lakes near Ilgatcho Lake, B.C. (*Dawson.*)

(97.) **N. luteum**, Smith. Yellow Pond-lily.

Found during the first journey of Sir John Franklin, in the wooded country Lat. 54°-64°. (*Richardson.*) In the summer of 1881, Dr. Robert Bell gathered a few specimens which I refer to this species in Lake Wabatongwashene, north of Lake Superior. Brome Lake, Eastern Townships, Q. (*McGill Coll. Herb.*) Sitka. (*Rothr. Alaska.*)

Var. ——— (?) Fletcher's Fl. Ott.

This form, found in the Ottawa River, near Ottawa city, Mr. Fletcher, after a careful examination of his specimens, and particularly the fruit, came to the conclusion was "merely a hybrid between *N. advena* and *N. Kalmiana*." To decide the question he sent both living and dried specimens to Professor R. Caspary, Director of the Botanic Gardens, Königsberg, the highest authority on *Nuphar*, whose answer was as follows: "I have not the slightest doubt but that your *Nuphar* is *N. advena*+*Kalmiana*. It is intermediate between the two, and what is decisive is this—its pollen is very bad; no less than 95 per cent. of the grains in the specimens sent had no foveola. *N. advena* and *Kalmiana*

and
the
River
New-

the
er of
to this
rome
Bothr

cher,
fruit,
t and
dried
lens,
as as
is N
at is
f the
niana

...like *H. ...* appears to be really *H. ...*, a
... variety.

98. This should be *H. calumiana*, Wik.

Monon's billie pond and in the stream running from Leamy's
into the Ottawa. ~~see~~ ^{see} ~~and~~
Kelle Island in the Lagoon.

99

99 ~~was~~. Lake Iroquois.

both ha
to belie
between
but it is
carefully

(98.) **N**

Newfo
(at.) In
Saguenay
ponds, R
Ont. (B
of Lake S
River, Ch
Rainy La
(edu.)

31. SA

(99.) **S.**

Very c
Newfound
Bear Lake

Var. **he**

S.

In a pea
scarcely co

(100.) **P.**

Introduc

both have very good pollen." From the above Mr. Fletcher is inclined to believe that all our notices of *N. luteum* refer to similar hybrids between these species, and I see no reason to doubt his conclusions; but it is of the utmost importance that all forms of *Nuphar* should be carefully collected.

(98.) **N. pumilum**, Smith. Small Yellow Water-lily.

Nymphaea lutea, var. *Kalmiana*. Michx. Fl. L., 311.

Nuphar Kalmiana. Ait. Pursh, 369.

Nuphar lutea var. *Kalmiana*. Torr. & Gray, Fl. L., 58.

Nuphar luteum, var. *pumilum*. Gray's Manual, 57. Macoun's Cat. No. 96.

Newfoundland. (*Morrison*.) In water, Woodstock, N.B. (*Fletcher's Cat.*) In the Matapedia River, below Amqui Station, Q. (*Macoun*.) Saguenay River and Lake St. John, Q. (*Brunet*.) Lakes and ponds, Rivière du Loup, Q. (*Thomas*.) Nation River railway crossing, Ont. (*Billings*.) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) North shore of Lake Superior. (*Agassiz*.) Black Creek, Hastings Co., Ont.; North River, Crow and Belmont Lakes, Peterboro' Co., Ont.; east shore of Rainy Lake. Rather rare. (*Macoun*.) River Saskatchewan. (*Bourgeau*.)

VII. SARRACENIACEÆ. PITCHER-PLANTS.

31. SARRACENIA, Tourn. (SIDE-SADDLE FLOWER.)

(99.) **S. purpurea**, Linn. Pitcher-plant.

Very common in peat bogs and tamarac swamps from Labrador, Newfoundland and Nova Scotia to the Rocky Mountains. North to Bear Lake. (*Richardson*.)

Var. **heterophylla**, Torrey.

S. heterophylla. Eaton, Manual, 4 ed., 447.

In a peat bog near Ottawa. (*Fletcher*.) This variety seems to be scarcely constant.

VIII. PAPAVERACEÆ. POPPY FAMILY.

32. PAPAVER, Linn. (POPPY.)

(100.) **P. somniferum**, Linn. Common Poppy.

Introduced in gardens. Spontaneous in gardens in New Brunswick.

(*Fowler's Cat.*) Around dwellings, in some places escaped, Nova Scotia. (*Lawson.*) In waste places at Ottawa. (*Fletcher Fl. Ott.*) Toronto. (*Dr. Croft.*) Near Goderich, Ont. (*Gibson.*) Frequent in old gardens in Prince Edward, Hastings and Northumberland counties, Ont.

(101.) **P. Rhæas**, Linn.

Corn field in vicinity of Ottawa. (*Fletcher Fl. Ott.*) Escaped from cultivation.

(102.) **P. nudicaule**, Linn. Arctic Poppy.

P. alpinum, Linn. Hook. Arct. Pl., 225.

Barren grounds from Lat. 64° to the Arctic Sea, in Lat. 69°. (*Richardson.*) Everywhere upon the shore of the Arctic Sea throughout the whole breadth of the continent, and in the islands. (*Parry, Franklin.*) Labrador. (*Morrison.*) Upon the Rocky Mountains, at a great elevation, Lat. 52°-55°. (*Drummond.*) S. Kootanie Pass, near the 49th parallel. (*Dawson.*) Greenland. (*Hook. Arct. Pl.*)

33. PLATYSTICMA, Benth.

(103.) **P. Oreganum**, Benth.

Meconella Oregana. Nutt. Torr. & Gray Fl. L., 64. Macoun's Cat., No. 112.

Common on the grassy slopes of Cedar Hill and other similar localities near Victoria, Vancouver Island, 1875.

34. SANGUINARIA, Linn. (BLOOD-ROOT.)

(104.) **S. Canadensis**, Linn. Blood-root.

Pictou and Truro, Nova Scotia. (*Lawson.*) York County, Keswick Ridge, N.B. Said to be common at intervalles above Fredericton, N.B.; also on the Matapedia, Q. (*Fowler's Cat.*) Common from Rivière du Loup, Q. (*Thomas.*) Westward throughout the western part of Quebec and Ontario. Found at one locality in Pembina Mountain, Man. (*Dawson.*)

35. CHELIDONIUM, Linn. (CELANDINE.)

(105.) **C. majus**, Linn. Celandine.

Introduced. A garden weed at Fredericton, N. B. (*Fowler's Cat.*)

Nova
(*Ott.*)
ent in
unties,

d from

(*Rich-*
out the
unklin.)
e eleva-
e 49th

's Cat.,

locali-

eswick
, N.B. ;
ière du
part of
untain,

's Cat.)

Stewart. 1. June 22.

St. Fo.
Presco
Montr
(Buch
Ont.
and are

(106.)

A spe
Rivière
Vicinity
dant in
(Logie.)
bushes a
West, O
Sound, in
often com

37.

(107.) D

E
C

Pictou
woods, N
of Chale
woods.

(108.) D

Ca
Ca
Di

Truro, 2
Mirivin's
Vicinity

St. Foy's Road, Q., Three Rivers, Q. (*Brunet.*) Desett's Woods, near Prescott, Ont. (*Billings.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Montreal Mountain. (*MacLagan.*) Mountain side near Hamilton, Ont., (*Buchan.*) Not uncommon at London, Ont. (*Saunders.*) Dundas, Ont. (*Dr. Ellis.*) Roadsides Brighton, Picton, Belleville, Kingston, and around the Carrying Place, Bay of Quinte, Ont.

IX. FUMARIACEÆ. FUMITORY FAMILY.

36. ADLUMIA, Raf. (CLIMBING FUMITORY.)

(106.) *A. cirrhosa*, Raf. Cypress Vine.

Corydalis fumigosa, Pursh, 463.

Fumaria recta, Michx. Fl. II., 51.

A sport in gardens at St. Stephen, N. B. Introduced? (*Vroom.*) Rivière du Loup, rare. (*Thomas.*) Temiscouata Portage, Q. (*MacLagan.*) Vicinity of Kingston, Ont. (*Brunet.*) Vicinity of Ottawa, very abundant in rocky woods. (*Fletcher Fl. Ott.*) Hamilton, Ont., rare. (*Logie.*) Gore Bay, Georgian Bay. (*J. Bell.*) Climbing high over bushes and small trees in burnt woods along the River Trent, Seymour West, Ont.; abundant in woods east of Belleville, Ont.; also at Owen Sound, in burnt woods. Very often cultivated for ornament, and hence often considered an introduced flower.

37. DICENTRA, Bork. (DUTCHMAN'S BREECHES.)

(107.) *D. cucullaria*, DC. Dutchman's Breeches.

Fumaria Cucullaria, Michx. Fl. II., 51.

Corydalis Cucullaria, Pursh, 462.

Pictou, N. S. (*McKay.*) Appearing in the early spring in rich woods, New Brunswick. Rather rare. (*Fowler's Cat.*) From the Bay of Chaleur throughout Quebec and Ontario to Georgian Bay in rich woods.

(108.) *D. Canadensis*, DC. Squirrel Corn.

Corydalis formosa, Pursh, 462, in part.

Corydalis Canadensis, Goldie. Edinb. Phil. Journ. VI., 330.

Dicentra eximia, var. β , Hook. Fl. I., 35. Macconn's Cat., No. 105.

Truro, N.S. (*Lawson.*) St. Anselm and St. Therese, Q. (*Brunet.*) Mirivin's Woods and other localities, Prescott, Ont. (*Billings.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Mountain side west of

Hamilton, Ont. (*Logie*.) Vicinity of Barrie, Ont. (*Spotten*.) Navy Island, Niagara River. (*MacLagan*.) Frequent in rich, rocky woods, Belleville, Picton, Brighton, Owen Sound and London, Ont.

(109.) **D. formosa**, DC.

D. eximia, Hook. Fl. I., 35.

D. saecula, Nutt. Torr. & Gray, Fl. I., 67.

Nootka Sound. (*Menzies*.) In rich woods a little above New Westminster, B. C. *Dicentra eximia* was cited in Hooker's Flora Boreali Americana as growing at Montreal, but he referred to *D. Canadensis*, and Brunet's plant is very likely the same.

38. CORYDALIS, Vent. (CORYDALIS.)

(110.) **C. glauca**, Pursh. Pale Corydalis.

Fumaria sempervirens, Michx. Fl. II., 51.

Corydalis sempervirens. Richards. in Frankl. Journ., 16.

Windsor, N. S. (*How*.) Northwest Arm, Halifax, and Pictou, N. S. (*Lawson*.) Common throughout Quebec and Ontario and extending to the Rocky Mountains, especially in rocky districts. Only detected once in British Columbia. at Yale, 1875. (*Macoun*.) North to Lat. 64°. (*Richardson*.) Point Barrow to Mackenzie River. (*Pullen*.)

(111.) **C. aurea**, Willd. Golden Corydalis.

Rocky woods along the Restigouche River, Q. (*Brunet*.) Saguenay River and North to Lake St. John, Q. (*Provancher*.) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Maitland Valley, Huron Co., Ont. (*Gibson*.) Cockburn Island, Macleod's Harbor, Georgian Bay. (*J. Bell*.) North Shore of Lake Superior. (*Agassiz*.) North to Lat. 64°. (*Richardson*.) Quite common in woods after the fire runs through them and on gravelly banks of rivers. Rocky banks and sandy fields, Seymour, Ont.; banks of the Trent and Moira Rivers, Ont.; Michipicotin Island and Dawson Route, Lake Superior; Manitoba Lake, Man.; Fort Edmonton, N.W.T.; and across the wooded country to Dunvegan, on Peace River. (*Macoun*.)

Var. **occidentalis**, Gray.

This variety occurs on the plains a little east of the Rocky Mountains, from the Hand Hills southward to the forty-ninth parallel. In British Columbia it is found on Vancouver Island and in numerous places up the Fraser to Stuart Lake.

Navy
oods,

Vest-
reali
ensis,

N. S.
nding
ected
t. 64°.

enay
ty of
Ont.
Bell.)
64°.
ough
fields,
ehipi-
Man.;
regan,

Moun-
l. In
nerous

109 In answer of reader's Son. ...

(112.)

Ver
Island
to the

(112
Territo

(112
Sound,
Columb

(113.)

Intro
Buctouc
Burling
College,
(*Macoun*

(114.)

Winds
Ottawa.
Ont. (*Se*
Castleton
dant at C
ships of
County, C
Pieton an

(115.)

In wat
its tribut

- (112.) **C. flavula**, DC. Yellow Corydalis.

Very abundant around the stone quarry on the north end of Pelee Island; also on Point Pelee, shore of Lake Erie. Apparently confined to the southwest of Ontario.

Doubtful Species.

- (112 b.) **C. Scouleri**, Hook., has been collected in Washington Territory, and may occur in Southern British Columbia.

- (112 c.) **C. pauciflora**, Persoon, occurs in Alaska at Norton Sound, and may possibly be found in the northern part of British Columbia.

39. FUMARIA, Linn. (FUMITORY.)

- (113.) **F. officinalis**, Linn. Common Fumitory.

Introduced from Europe. Escaped from ballast in a few places. Buctouche, St. Johns, &c., N. B. (*Fowler's Cat.*) Quebec. (*Bruct.*) Burlington Beach, Hamilton, Ont. (*Logie.*) Grounds of Queen's College, Kingston, and as a weed in gardens, Prince Edward Co., Ont. (*Macoun.*)

X. CRUCIFERÆ. MUSTARD FAMILY.

40. NASTURTIIUM, R. Br. (WATER-CRESS.)

- (114.) **N. officinale**, R. Br. Water-cress.

Sisymbrium Nasturtium. Pursh, 440.

Windsor, Newport and Truro, N.S. (*How.*) In the vicinity of Ottawa. (*Fletcher Fl. Ott.*) In a creek half a mile west of London, Ont. (*Saunders.*) Found at Galt, Ont. (*Logie.*) Rivulets and in springs, Castleton, Ont. Small brooks on Rice Lake Plains, Ont. Very abundant at Campbellford and in nearly all the small brooks in the Townships of Seymour, Brighton, Percy and Murray, Northumberland County, Ont. Also abundant at Niagara, above the Falls. Ditches at Pieton and Owen Sound, Ont. (*Macoun.*)

- (115.) **N. palustre**, DC. Marsh-cress.

Sisymbrium palustre, Linn. Pursh, 440.

Camelina Barbareaefolia, DC. Hook. Fl. I., 65.

In water and wet places. Common along the St. John River and its tributaries. (*Fowler's Cat.*) Borders of rivulets near Lotbinière, Q.

(*Brunet.*) Vicinity of Montreal. (*McGill Coll. Herb.*) Common in moist places at Prescott, Ont. (*Billings.*) Vicinity of Ottawa. (*Fletcher, Fl. Ott.*) Rivière du Loup, Q.; not common. (*Thomas.*) Kingston, St. Catharines, Cayuga and Malden, Ont. (*MacLagan.*) The Dawson Route, and the second crossing of the Souris, Man. (*Burgess.*) Goulais Point, on Lake Superior; north end of Lake Winnipeg; Nelson River to York Factory and Echimamish River to Oxford House. (*R. Bell.*) Winnipeg and Northwest Angle Lake of the Woods. (*Dawson.*) Very common along the borders of streams throughout the prairie region, as well as the margins of ponds. (*Macoun.*) Eschscholtz Bay, Ounalashka; and Youcon River. (*Roth. Alask.*) Greenland. (*Hook. Arct. Pl.*)

Var. **hispidum**, Fisch & Mey.

Nasturtium hispidum, DC. Torr. & Gray. Fl. L., 74. Macoun's Cat., No. 117.

Vicinity of Ottawa. (*Fletcher Fl. Ott.*) In the neighborhood of London, Ont. (*Burgess.*) Low, wet ground about New Westminster, B.C. (*Macoun.*)

(116.) **N. amphibium**, R. Br.

Sisymbrium amphibium, Linn. Pursh. 440.

In watery places, about Montreal and Lake Huron. (*Hooker.*) Gregory's Creek, near Montreal, 1821. (*Holmes.*) Beauharnois Co., Q. (*McGill Coll. Herb.*) In ditches at Ottawa. In ditches along the railway west of Shannonville, also west of Belleville, Ont.; ditches at Fort William, Lake Superior, 1869. (*Macoun.*) Dartmouth River, Gaspé, Q.; L'Orignal, Ont. (*J. Bell.*)

(117.) **N. trachycarpum**, Gray.

Very abundant on the Cypress Hills, N. W. T., in dried up pools; also in the bed of Maple and other Creeks north of the Cypress Hills, 1880. (*Macoun.*)

(118.) **N. curvisiliqua**, Nutt.

Sisymbrium curvisiliqua, Hook. Fl. L., 61.

N. cernuum & *polymorphum*, Nutt. Torr. & Gray, Fl. L., 74.

Common on the North-west Coast as far north as Lat. 48° in sandy soils, near streams. (*Douglas.*) Along the Fraser a short distance above New Westminster, B.C., 1875. (*Macoun.*) Near Yale. B.C. (*Hill.*)

in
wa.
as.)
an.)
lan.
nni-
ord
the
gh-
nn.)
sk.)

'at,

d of
ter,

er.)
, Q.
the
ches
wer,

ols ;
ills,

ndly
nce
B.C.

Malloctus Bay.
Casselman abundant.

(119.)

In wa
Fl. Ott.
Ont. (C
waters
great p
Percy C

(120.)

Intro
mon ne
deposi
Amherst
Ottawa.

(121.)

Pictou
(Fowler's
Loup, Q.

(122.)

Low gr
near Ott
London, C
Pentangu
Malden, C
near Amh

(123.)

D.
Northw
(Lyall.)
(Macoun.)

C. heter
cipal of T

(119.) **N. lacustre**, Gray. River-cress.*N. natans*, Hook. Fl. I., 39.*N. natans*, var. *Americianum*, Gray. Torr. & Gray Fl. I., 75.(?) *Cochlearia aquatica*, Eaton, Manual, 181.

In water near Montreal. (*Goldie*.) Vicinity of Ottawa. (*Fletcher*, Fl. Ott.) Near Prescott, Ont. (*Provancher*.) Grand River and Malden, Ont. (*MacLagan*.) Ramsay, Ont. (*J. Bell*.) Very abundant in the still waters of the Trent between Heely's Falls and Hastings village, and in great profusion in the Trent at Meyersburg above the bridge over the Percy Creek, Ont.; also at Port Dover on Lake Erie. (*Macoun*.)

(120.) **N. Armoracia**, Fries. Horse Radish.*Armoracia rusticana*, Rupp. Wood, Bot. & Fl., 41.

Introduced. Wastes near gardens, Quebec. (*Brunet*.) Not uncommon near London, Ont. (*Burgess*.) Waste places where rubbish is deposited in and around Belleville, Ont.; Canada Southern Railway near Amherstburgh, Ont., and at Niagara Falls. (*Macoun*.) Vicinity of Ottawa. (*Fletcher* Fl. Ott.)

41. DENTARIA, Linn. (PEPPER-ROOT.)(121.) **D. diphylla**, Michx. Krinkle Root.

Pictou, N.S. (*McKay*.) Kent Co., and near Fredericton, N.B. (*Forster's Cat.*) Bathurst, N.B. (*McGill Coll. Herb.*) Rivière du Loup, Q. (*Thomas*.) Throughout Quebec and Ontario to Lake Superior.

(122.) **D. laciniata**, Muhl. Purple-flowered Tooth-wort.

Low grounds of the river St. Francis, Q., rare. (*Brunet*.) Beechwood, near Ottawa. (*Fletcher* Fl. Ott.) Common in rich woods near London, Ont. (*Burgess*.) Mountain west of Hamilton, Ont. (*Logie*.) Pentanguishene, Ont. (*Richardson*.) Chippewa, Navy Island, and Malden, Ont. (*MacLagan*.) Ameliasburgh, P. E. County, Ont., and near Amherstburgh, Lake Erie. (*Macoun*.)

(123.) **D. tenella**, Pursh. 439.*D. tenuifolia*, Hook. Fl. I., 46.

Northward to Vancouver Island and Lower Fraser River, B. C. (*Lyall*.) In low rich ground, vicinity of Victoria, Vancouver Island. (*Macoun*.)

Doubtful Species.

C. heterophylla is reported from Hamilton by Mr. ^{J. M.} Buchan, Principal of Trinity College, Toronto, and **D. maxima**, from Galt, by

Judge Logie, but as both these species have been included in *D. laciniata*, I consider the above references to apply to it, No. 128 of my Catalogue (1878) refers to the same polymorphous species.

42. CARDAMINE, Linn. (BITTER-CRESS.)

(124.) *C. rhomboidea*, DC. Spring-cress.

Arabis rhomboidea, Pers. Pursh., 437.

C. rotundifolia, var. *a.*, Torr. & Gray, Fl. I., 83.

Pietou and Truro, N. S. (*McKay & Lawson*.) Wet meadow at Stinson's Saw Mill on the Moira near Belleville; also in a wet boggy wood at Amherstburg, Lake Erie. (*Macoun*.) Wet places, common at London, Ont. (*Burgess*.) Galt, Ont. (*Miss Crooks*.) Malden, Ont. (*MacLagan*.)

(125.) *C. rotundifolia*, Michx. Mountain Water-cress.

C. rotundifolia var. *γ.*, Torr. & Gray, Fl. I., 83.

In a piece of rich ground within the limits of Belleville, Ont. (*Macoun*.) In a springy wood at Billings Bridge, near Ottawa. (*Fletcher*.)

Var. *purpurea*, Torr.

C. rotundifolia, Michx. Hook. Fl. I., 44.

C. rotundifolia var. *β.* Torr. & Gray, Fl. I., 83.

Beauharnois Co., Q.; vicinity of Port Colborne, Ont. (*McGill Coll. Herb.*) Quite common in the vicinity of Hamilton, Ont. (*Logie*.) Wet, shady woods, London, Ont. (*Burgess*.) Rocky Mountains, Lat. 52°-57°, and thence to Hudson's Bay in the same latitude. (*Drummond*.)

NOTE.—Much confusion exists regarding the last three forms, and botanists are earnestly requested to collect all varieties wherever found. The roots are particularly desirable.

(126.) *C. bellidifolia*, Linn. Dwarf Water-cress.

Summits of the Rocky Mountains, Lat. 52°. (*Drummond*.) Throughout Arctic America sparingly. (*Richardson*.) Greenland. (*Hook. Arct. Fl.*)

(127.) *C. purpurea*, Cham. & Schlecht.

Possibly this species occurs in the northwestern part of British Columbia, as it is not rare in Alaska.

in
128

r at
eggy
mon
Ont.

Ont.
awa.

(Coll.
gie.)
Lat.
md.)

and
ever

ugh-
look.

itish

(128)

In
min.

(129)

W

Co.,

Pres

Wet

Millg

(*Gibb*

(*Drum*

of H

Canal

white

(130.

Ve

the sh

readil

enough

of land

the fo

Van

Dry

(*Macos*

Found

lagan.)

(131.)

In lo

ently c

(132.)

Cov

- (128.) **C. angulata**, Hook. Fl. I., 44.

In rich soil around Victoria, Vancouver Island, and near New Westminster, B.C. This is the *C. paucisecta* of my Catalogue, 1878.

- (129.) **C. pratensis**, Linn. Ladies' Smock.

C. digitata (?) Richards. Frankl. Journ., 15.

Wet, swampy meadows, Labrador. (*Brunet.*) St. Patrick, Charlotte Co., N. B. (*Vroom.*) Near Ottawa and Prescott Railway; vicinity of Prescott Junction; also three miles south of Ottawa. (*Billings.*) Wet meadows and swamps, Hastings County, Ont. (*Macoun.*) Near Millgrove, Ont. (*Logie.*) Shore along Lake Burwell, Lambton Co, Ont. (*Gibson.*) Whiskey Island, Georgian Bay. (*J. Bell.*) Hudson's Bay. (*Drummond.*) Throughout Arctic America. (*Richardson.*) East coast of Hudson's Bay. (*R. Bell.*) Greenland. (*Hook. Arct. Pl.*) The Canadian form is usually more slender than the European, and always white flowered.

- (130.) **C. hirsuta**, Linn. Small Bitter-cress.

C. pennsylvanica, Muhl. Pursh, 240.

Very abundant in rivulets and around springs, from Nova Scotia to the shores of the Arctic Sea and west to the Pacific. Eastern forms are readily distinguished from western ones, but are scarcely different enough to found a variety upon. A peculiar form grows on the height of land west of Lake Superior, which seems to connect the species with the following variety:—

Var. **sylvatica**. Gray, Manual, 67.

C. virginica, Michx. Pursh, 439.

C. hirsuta, var. *virginica*, Torr. & Gray Fl. I., 85.

C. sylvatica, Gray. Macoun's Cat., No. 126.

Dry rocks close to Shannonville station of the G. T. R., Ont., 1864. (*Macoun.*) Rocks at the Montmorenci Falls, Quebec. (*Brunet.*) Found at Galt, Ont. (*Logie.*) Jones' Falls, near Owen Sound. (*Mac-lagan.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*)

- (131.) **C. oligosperma**, Nutt. Torr. & Gray Fl. I., 85.

In low, wet places around Victoria, Vancouver Island, 1875. Apparently common. (*Macoun.*)

43. ARABIS, Linn. (ROCK-CRESS.)

- (132.) **A. lyrata**, Linn. Lyre-leaved Rock-cress.

Sisymbrium arabidoides. Hook. Fl. I., 63.

Common on the banks of rivers from the Eastern Provinces to Lat.

68°. (*Richardson*.) London and on the sands at Sarnia, Ont. (*Burgess*.) At the Whirlpool, Niagara Falls. (*Buchan*.) Abundant on Point Pelee, Lake Erie; from the Sault Ste. Marie to Pic River, Lake Superior; Lake of the Woods. McLeod's Lake, B. C. (*Macoun*.)

(133.) **A. petræa**, Lam. Rock-cress.

Cockburn Island, Lake Huron; York Factory. (*R. Bell*.) Crevices of rocks about five miles north of Michipicotin Harbor, Lake Superior. (*Macoun*.) Itasyouco River, B. C. (*Dawson*.) Throughout Canada, extending westward to the Rocky Mountains, Lat. 55°-56°, and to the islands of the Polar Sea. (*Hooker Fl. I.*, 42.) Greenland. (*Hook. Arct. Pl.*)

(134.) **A. petræa**, var. **ambigua**, Regel.

A. ambigua, DC. *Hook. Fl. I.*, 42.

Sandy and grassy places on the shores of the island of Ounalashka. (*Chamisso*.) In grassy places by brook sides near Yale, B. C., May 16th, 1875. It is desirable to obtain this in fruit, as there is some uncertainty about the position of the species.

(135.) **A. hirsuta**, Scop. Hairy Rock-cress.

Turritis ovata, Pursh, 438.

A. sagittata, DC. *Buchan* in *Hamilton List*, 12.

A. rupestris, Nutt. *Torr. & Gray Fl. I.*, 81.

Turritis patula, Pl. *Bourgeau*, 263 in part.

A. Gerardi, var. *borcalis*. *Macoun's Cat.*, 136.

Eel River, Restigouche; on rocks, Portland, N.B. (*Fowler's Cat.*) Collected in Madawaska, N.B. (*Hay*.) Common on river banks and amongst rocks from Gaspé to the Pacific, and north to Lat. 68°. Sitka and Ounalashka. (*Roth. Alask.*)

(136.) **A. Holboëllii**, Hornem.

Turritis patula, Graham. *Hook. Fl. I.*, 40.

(?) *Turritis mollis*. *Hook. Fl. I.*, 40.

Streptanthus angustifolius et *virgatus*, Nutt. *Torr. & Gray Fl. I.*, 76.

(?) *Arabis sparsiflora*, Nutt. *Torr. & Gray Fl. I.*, 81.

Very abundant in the sparsely wooded country from Manitoba westward, and through the valleys of the Rocky Mountains to British Columbia, being abundant both at Spence's Bridge and in the neighborhood of Victoria. A variety with very short stems and very hairy root-leaves, occurs in the Bow River Pass, also on the highest summits of the Rocky Mountains about Lat. 55°, according to Drummond. It extends north to Lat. 68° and shores of the Arctic Sea, Long. 107°-109°. (*Hooker*.) Greenland. (*Hook. Arct. Pl.*)

3.)
ee,
r;

es
or.
la,
he
/k.

ka.
y
ne

(t.)
nd
ka

est-
ish
or-
iry
its
It
99.

(137.)

Por
Rocky
Mack
Index,
Hook
pods a

(138.)

Eel
Rocky
rocky
ward t
species

Var.

On th
West of

(139.)

This s
parallel,
again fo

(140.)

Montr
(*Fletcher*
(*Mutlago*
Hastings
Ont.: O
fifteen m
Rocky M
ally on th
of Slave

(137.) **A. retrofracta**, Graham.*Tarritis retrofracta*, Hook. Fl. L., 41.

Portage du Fort, Ottawa River. (*Gibson*.) Hudson's Bay to the Rocky Mountains, and from the Eastern Provinces to Lat. 68° at the Mackenzie River. (*Richardson*.) Sereno Watson, in his Botanical Index, unites this with the preceding, but I am led to agree with Hooker and consider it distinct, on account of its refracted flowers and pods and its different habitat.

(138.) **A. Drummondii**, Gray.*Tarritis stricta*, Grah. Hook. Fl. L., 40.*Tarritis glabra* var. β . Torr. & Gray Fl. L., 78.(?) *Tarritis spathulata*, Nutt. Torr. & Gray Fl. L., 78

Eel River, Restigouche, N.B. (*Fowler's Cat.*) Prairies of the Rocky Mountains, Lat. 52°-56°. (*Drummond*.) Abundant on the rocky banks of streams throughout Quebec and Ontario, and westward to the Pacific, both on the prairie and in the forest. A fine species, and very distinct.

Var. **brachycarpa**, Gray.*Tarritis brachycarpa*, Torr. & Gray, Fl. L., 79.

On the sandy spit at the mouth of the Magdalen River, Gaspé, 1882. West of Touchwood Hills, N.W.T. (*Macoun*.)

(139.) **A. Lyallii**, Watson. Lyall's Tower-mustard.*A. Drummondii*, var. *alpina*, Watson.(?) *A. microphylla*, Nutt. Torr. & Gray, Fl. L., 32.

This species was found by Dr. G. M. Dawson in 1875, near the 49th parallel, at an attitude of 7,000 feet, and in the summer of 1881 he again found it near the same locality.

(140.) **A. perfoliata**, Lam. Smooth Tower-mustard.*Tarritis glabra*, Linn. Hook. Fl. L., 40.*Tarritis macrocarpa*, Nutt. Torr. & Gray, Fl. L., 78.

Montreal Mountain. (*McGill Coll. Herb.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Amherstburgh and islands in Detroit River. (*MacLagan*.) Whiskey Island, Lake Huron. (*J. Bell*.) Counties of Hastings and Northumberland, Ont.; abundant at Port Stanley, Ont.; Owen Sound, Lake Huron; shore of Lake Superior and fifteen miles up the Kaministiquia. (*Macoun*.) Hudson's Bay to the Rocky Mountains and as far north as Lat. 64°. (*Richardson*.) Occasionally on the Great Plains; at Fort Assiniboine, on the Athabasca, west of Slave Lake: northern British Columbia. (*Macoun*.)

(141.) **A. lævigata**, Poir.*Turritia lævigata*, Muhl. Pursh. 438.*A. heterophylla*, Nutt. Torr. & Gray, Fl. I., 81.

Rocky woods along streams. North shore of the St. Lawrence above Quebec. (*Barnston*.) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Valley of the Rivière aux Sables, Lambton Co., Ont. (*Gibson*.) London, Ont. (*Burgess*.) Malden, Ont. (*MacLagan*.) On rocks, Heely's Falls, Seymour, Co. Northumberland; on Gibson's Mountain, P. E. County; Laurentian rocks, Shannonville; Royston Park, Owen Sound; and Port Stanley, Lake Erie, also Queenston Heights. (*Macoun*.)

(142.) **A. Canadensis**, Linn. Sickl. Pod.*A. falcata*, Michx. Fl. I., 31. Pursh. 437.

Dry rocky ravines and hill sides. Vicinity of Hamilton, Ont. (*Logie*.) Malden, Ont. (*MacLagan*.) Bosanquet Township, Lambton Co., Ont. (*Gibson*.) Vicinity of London and Toronto. (*Burgess*.) Laurentian rocks at Shannonville, Hastings Co.; hill sides in rear of Picton, P. E. County; woods near Fenelon Falls, Victoria Co.; abundant in Talbot's Woods, near Port Stanley, and in the woods from Niagara Falls to Queenston, Ont. (*Macoun*.)

(143.) **A. alpina**, Linn. Mountain Cress.

In Labrador. (*Colmaster*.) Forteau Bay, Labrador. (*Butler*.) Along the coast of the Gulf of St. Lawrence 13 miles below the mouth of Ste. Anne des Monts River; up that stream about twenty miles from its mouth, and very abundant in a small brook descending from the northern face of Mount Albert, Shickshock Mountains, Gaspé, 1882. (*Macoun*.) Greenland. (*Hook. Arct. Pl.*)

(144.) **A. stricta**, Huds.Labrador. (*Colmaster* vide *Pursh*.)**44. BARBAREA, R. Br. (WINTER-CRESS.)**(145.) **B. vulgaris**, R. Br. Yellow Rocket.

Four-mile House near Halifax, and Picton, N. S. (*Lawson & McKay*.) A weed at Richibucto, N. B. (*Fowler's Cat.*) Vicinity of Quebec. (*Brunet*.) Harbor Grace, Nfld.; sea shore, Murray Bay, Q.; Montreal Mountain. (*McGill Coll. Herb.*) On rocks along the Lovers' Walk, Ottawa. (*Fletcher*.)

The above references may principally apply to an introduced form.

rove
lley
Ont.
our,
ian
ley,

Ont.
oton
ess.)
r of
oun-
rom

ler.)
outh
rom
the
882.

n &
inity
, Q.;
ers'

rm.

Va

Qu
(*Ma*
(*Roth*

Va

Mis
Cockl
Sound
Lake
Red
River
provin

(146.)

Moi
and c
(*Matco*
Mount

(147.)

A ve
region
the Sas

(148.)

Not
Ellice;
Fort W
hills be
Hill.)
(*Dawso*

(149.)

Intro
natural

Var. **arcuata**, Koch. Western Winter-cress.

Barbarea vulgaris, R. Br. Hook. Fl. I., 39.

B. praecox, R. Br. Macoun's Cat., No. 141.

(Quite common in wet places around Victoria, Vancouver Island. (Macoun.) Dean's Inlet, B. C. (Dawson.) Sitka and Norton Sound. (Roth. Alask.)

Var. **stricta**, Regel. Common Winter-cress.

Barbarea praecox, R. Br. Hook. Fl. I., 39.

Mississagui Island, south side of St. Joseph's Island, Whiskey and Cockburn Islands, Lake Huron. (J. Bell.) Queenston Heights; Owen Sound Bay; Chicken Bay, east shore of Lake Huron; north shore of Lake Superior from the Sault Ste. Marie to Thunder Bay; shore of Red Deer Lake, Manitoba; Edmonton on the Saskatchewan; Peace River valley. (Macoun.) Banks of rivers; abundant from the eastern provinces to Lat 68°. (Drummond.)

45. ERYSIMUM, Linn. (TREACLE-MUSTARD.)

(146.) **E. cheiranthoides**, Linn. Worm-seed Mustard.

Moist ground along streams, on dry ridges and prairies, in gardens and cultivated fields from the vicinity of Ottawa to the Pacific. (Macoun.) Throughout Canada, and in all the plains east of the Rocky Mountains to Lat. 67° on the Mackenzie. (Hooker.)

(147.) **E. asperum**, DC. Prairie Rocket.

A very prominent object on dry, gravelly soil throughout the prairie region. It extends northward about sixty miles beyond Carleton, on the Saskatchewan. (Macoun.)

(148.) **E. parviflorum**, Nutt.

E. lanceolatum, Hook. Fl. I., 64.

E. asperum var. *inconspicuum*, Wats. Macoun's Cat., 143 var.

Not so abundant as the preceding, but has been collected at Fort Ellice; west of Touchwood Hills; at Long Lake; Cypress Hills, near Fort Walsh; Hand Hills; and at Morley, N. W. T.; also on the dry hills between Spence's Bridge and Cache Creek, B. C. (Macoun & Hill.) On the Belly and Milk Rivers, N. W. T.; Nicoamen, B. C. (Dawson.)

(149.) **E. orientale**, R. Br.

Introduced with ballast. Ballast heaps, Richibucto. Apparently naturalized in New Brunswick. (Fowler's Cat.)

46. SISYMBRIUM, Linn. (HEDGE-MUSTARD.)

- (150.)
- S. officinale**
- , Scop. Hedge-mustard.

Erysimum officinale, Linn. Pursh, 436.

An introduced and unsightly weed found in all cities, towns and villages throughout Ontario and the eastern provinces.

- (151.)
- S. linifolium**
- , Nutt.

S. juncea, Hook. Fl. I., 61. Macoun's Cat., No. 146.

In some abundance along the Thompson River below Spence's Bridge, B. C., 1875. (*Macoun & Hill.*)

- (152.)
- S. sophioides**
- , Fisch. Hook. Fl. I., 61.

S. Sophia var. Richards. in Frankl. Journ., 16.

York Factory on Hudson's Bay; to the shores of the Arctic Sea, westward of the Mackenzie River. (*Hooker.*) Along Nelson River near York Factory. (*R. Bell.*) Lake Winnipeg. (*Bark.*)

- (153.)
- S. Sophia**
- , Linn. Flaxweed.

Introduced from Europe. On the sand bar at the mouth of Magdalen River, Gaspé, 1882. (*Macoun.*) Borders of fences near Quebec. (*Brunet.*) Montreal. (*MacLagan & Holmes.*) East Street, Prescott, Ont. (*Billings.*)

- (154.)
- S. canescens**
- , Nutt. Tansy-mustard.

Cardamine (?) *multijida*, Pursh, 440.*S. Sophia*, Pursh, 440; not Linn.

In the low grounds, Lat. 50°-60°. (*Richardson.*) Plentiful about the Saskatchewan and Red Rivers. (*Douglas.*) In the Rocky Mountains and about Fort Franklin, Lat. 66°. (*Drummond.*) Very common throughout the prairie region, and extending to Peace River. Common in the dry interior of British Columbia. *S. incisum*, Engelm. is included in the above references.

Var. **brachycarpum**, Torr. & Gray Fl. I., 92.

S. brachycarpum, Richards. in Frankl. Journ., 16. Hook. Fl. I., 62.

I take this to be the forest form and the one which is found both East and North. St. Helen's Island, Montreal. (*MacLagan.*) Whiskey Island, Lake Huron. (*J. Bell.*) Point Pelee, Lake Erie; Little Current, Georgian Bay. North shore of Lake Superior at the Pie River, and quite frequent in the mixed forest and prairie to the Rocky Mountains.

and

re's

est-
ear

den
occ.
ott.

out
oun-
mon
mon
ded

both
key
ent,
and
ins.

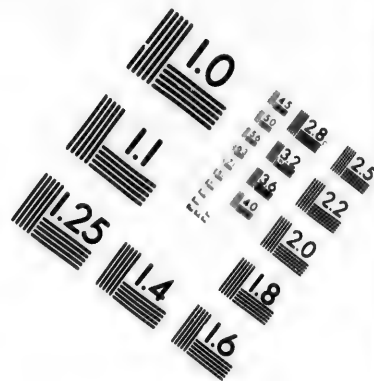
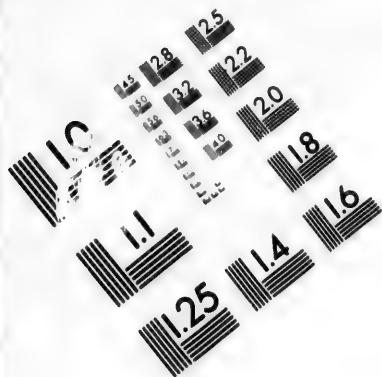
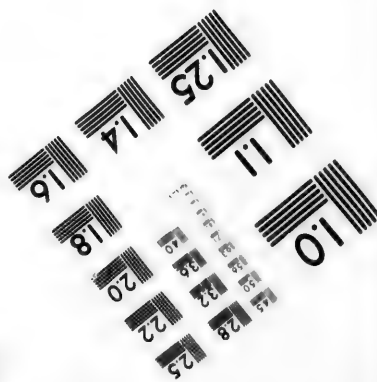
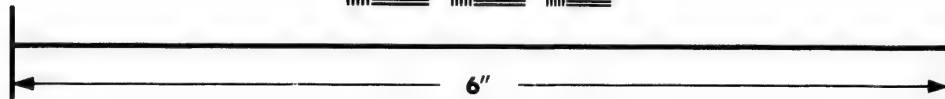
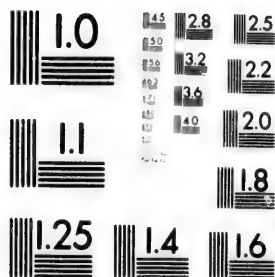


IMAGE EVALUATION TEST TARGET (MT-3)



Photographic Sciences Corporation

**23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503**



(15

T
date
hav
wes
Colu

V

T
Lya
Hill

Co
form

(156.

A
from
This

(157.

Ro
River

(158.)

Sho

(159.)

Intr
ground
Betwee
during
retain
a footin
them.

- (155.) **S. incisum**, Engelm. var. **Hartwegianum**, Watson.

S. canescens, Benth. Fl. Bourgeau; 254 in part.

(?) *S. canescens*, var. *brevipes*, Torr. & Gray Fl. I., 92.

This species has been confounded with *S. canescens* until a recent date, and hence Bourgeau is found to include it with *S. canescens*. I have found this species to be the common form on the southern plains west of Moose Jaw Creek, N. W. T., and in the dry interior of British Columbia.

Var. **filipes**, Gray Fl. Fendl, 8.

This form gathered at Yale, B. C., is identical with one found by Lyall on the southern boundary of British Columbia. (*Macoun & Hill*.)

Collectors are requested to preserve complete specimens of the four forms mentioned above.

- (156.) **S. acutangulum**, DC.

A native of southern Europe. Naturalized in California and brought from thence to the vicinity of New Westminster, British Columbia. This species is No. 145 of my catalogue.

- (157.) **S. humile**, C. A. Meyer.

Rocky Mountains, Lat 52°-57°. (*Drummond*.) About the Mackenzie River, Lat. 60°-68°. (*Richardson*.)

- (158.) **S. salsugineum**, Pall.

Turritis diffusa, Hook. Fl. I., 41.

Shores of the Arctic Sea. (*Richardson*.)

47. BRASSICA, Tourn. (TRUE MUSTARD.)

- (159.) **B. Sinapis**, Boiss. Wild Mustard.

Sinapis arvensis, Linn. Torr. & Gray Fl. I., 99.

Introduced from Europe. A vile weed in cultivated fields and waste grounds from New Brunswick throughout Quebec and Ontario. Between Brighton and Toronto, on the line of the G. T. R., many fields during June are quite yellow with the flowers of this pest. Its seeds retain the power of germination for a long time, and after it once gets a footing on the soil years must elapse before the ground is freed from them.

(160.) **B. alba**, Gray. White Mustard.*Sinapis alba*, Linn. Gray, Manual I., Ed. 38.

Escaped from gardens in a few places in New Brunswick. (*Fowler's Cat.*) In a few localities around Ottawa. (*Fletcher Fl. Ott.*) In vicinity of Quebec. (*Brunet.*)

(161.) **B. nigra**, Koch.*Sinapis nigra*, Linn. Torr. & Gray Fl. I., 99.

Rare Introduced from Europe. Halifax and Cumberland Co., N. S. (*How.*) Rare near dwellings and on ballast. (*Fowler's Cat.*) Gardens and waste places, Quebec. (*Brunet.*) Streets of Prescott. (*Provancher.*) Around Ottawa. (*Fletcher Fl. Ott.*) In fields below Matane, Gaspé, Q. In old gardens and around barns and manure heaps in the Counties of Prince Edward and Hastings, and around Amherstburgh, Ont. (*Macoun.*)

(162.) **B. campestris**, Linn.

Introduced from Europe. Common in fields in Manitoba and around Winnipeg; also at Victoria, B. C.

48. CHEIRANTHUS, R. Br. (WALLFLOWER.)(163.) **C. asper**, Cham. & Schlecht.*C. capitatus*, Dougl. Hook. Fl. I., 38.*Erysimum grandiflorum*, Nutt. Torr. & Gray, Fl. I., 96 and 607.

Common at Puget Sound. (*Douglas.*) To be looked for in the southern part of British Columbia.

(164.) **C. pygmæus**, DC. Dwarf Wallflower.*C. Pallasii*, Pursh, 436. Hook. Fl. I., 38. Torr. & Gray, Fl. I., 71.*Hesperis pygmæa*, Hook. Fl. I., 60.*Hesperis minima*, Torr. & Gray, Fl. I., 90.*Hesperis Pallasii*, Torr. & Gray, Fl. I., 666.

On the northwest coast of America. (*Pallas.*) Bear Lake and thence to the shores of the Arctic Sea. (*Richardson.*) Kotzebue Sound and Cape Lisburne. (*Roth. Alask.*) Greenland. (*Hook. Arct. Pl.*)

49. PARRYA, R. Br. (ARCTIC ROCKET.)(165.) **P. nudicaulis**, Regel. Vars. **glabra** and **aspera**, Regel.*Cardamine articulata*. Pursh, 439.*P. macrocarpa*, R. Br. Hook. Fl. I., 47. Torr. & Gray Fl. I., 88.

Found during the second Arctic Land Expedition, and then only by

oler's
In

low.)
and
her.)
aspé,
the
urgh,

ound

a tho

and
zobue
Pl.)

Regel.

ly by

Capt
Freq
(Hoo

(166.

On
Arcti

(167.)

Dec
150°.

(168.)

Mon
vide *H*
in Prin
to Lake

(169.)

From
Sea, and
Rocky M
River Pa
(*Hook. A*

Var. *h*
D.

Summi
Selwyn,
(*Macoun.*)
Greenland

Var. *al*

D.
D.

Sea coas
son.) Mel

Capt. Sir John Franklin and Capt. Back, to the west of Mackenzie River. Frequent on the shores of Kotzebue Sound and the adjacent coast. (*Hooker.*)

(166.) **P. arctica**, R. Br. Arctic Parrya.

On the eastern Arctic Islands. (*Parry.*) Shores of the continent of Arctic America, eastward of the Mackenzie River. (*Richards.*)

(167.) **P. arenicola**, Hook.

Eutrema arenicola, Richards. Hook. Fl. I., 67. Torr. & Gray Fl. I., 112.

Deep sand upon the shores of the Arctic Sea, between Long. 107° and 150°. (*Richardson.*)

50. HESPERIS, Linn. (GARDEN ROCKET.)

(168.) **H. matronalis**, Linn. Sweet Rocket.

Montreal. (*McGill Coll. Herb.*) Shores of Lake Huron. (*Dr. Todd*, vide *Hooker.*) Spontaneous in many old gardens and along old fences in Prince Edward County and at Belleville, Ont. Hooker's reference to Lake Huron can only apply to a garden escape.

51. DRABA, Linn. (WHITLOW-GRASS.)

(169.) **D. alpina**, Linn. Alpine Whitlow-grass.

From Lat. 60° on the Rocky Mountains, to the shores of the Arctic Sea, and on the islands adjacent, where it principally abounds. (*Hooker.*) Rocky Mountains. (*Bourgeau.*) On limestone mountains in the Bow River Pass. (*Macoun.*) Kotzebue Sound. (*Roth. Alask.*) Greenland. (*Hook. Arct. Pl.*)

Var. **hebecarpa**, Lindb. (Hairy-podded variety.)

D. alpina, var. β , Hook. Fl. I., 50.

Summit of Stuart Lake Mountain, B. C., 1875; top of Mount Selwyn, Peace River Pass, Lat. 56°; Bow River Pass, Lat. 51°. (*Macoun.*) Summit Camp, Pine Pass, 2,850 feet, Lat. 55°. (*Dawson.*) Greenland. (*Hook. Arct. Pl.*)

Var. **algida**, Regel.

D. algida, Adams. Hook. Fl. I., 50.

D. pauciflora, R. Br. Hook. Fl. I., 51.

Sea coast between the Mackenzie and Coppermine Rivers. (*Richardson.*) Melville Island. (*Sabine.*) Barrow River. (*Parry.*) West of

the Mackenzie along the coast. (*Simpson.*) Island of St. Lawrence. (*Rothr. Alask.*)

Var. **glacialis**, Dickie.

D. glacialis, Adams. Hook. Fl. I., 51. Macoun's Cat. No. 159.

D. oligosperma, Hook. Fl. I., 51.

D. densifolia, Nutt. Torr. & Gray, Fl. I., 104.

Rocks on the loftiest of the Rocky Mountains, Lat. 52°-57°. (*Drummond.*) Rare on the shores of the Arctic Sea; summit of a limestone hill, Mackenzie River, Lat. 68°. (*Richardson.*) Bow River Pass. (*Macoun.*) Summit of S. Kootanie Pass. (*Dawson.*) Cape Lisburne. Assistance Bay, and Garry Island. (*Rothr. Alask.*)

Var. (?) **micropetala**, Durand.

D. micropetala, Hook. Fl. I., 52.

Sea coast between the Mackenzie and Coppermine Rivers. (*Richardson.*)

Var. (?) **corymbosa**, Durand.

D. corymbosa, R. Br. Hook. Fl. I., 52.

D. alpina var. δ , Hook. Fl. I., 50.

Labrador. (*Brunet.*) Shores of the Arctic Sea. (*Capt. Ross.*) Greenland. (*Hook. Arct. Pl.*)

(170.) **D. stellata**, Jacq. Hook. Fl. I., 53.

Unalashka an. Kotzebue Sound. (*Torr. & Gray, I., 105.*)

Var. **nivalis**, Regel.

D. muricella, Wahl. Hook. Fl. I., 52. Macoun's Cat. No. 156.

Labrador. (*Colmaster.*) Arctic Shores of America. (*Parry.*) Wooded country, Lat. 54°-64°. (*Richardson.*) Stuart Lake Mountain, B. C. (*Macoun.*) Wainwright Inlet. (*Rothr. Alask.*)

Var. **hebecarpa**, DC. Hook. Fl. I., 53.

Arctic America. (*Richardson.*) Kotzebue Sound, Ounalashka, and Island of St. Lawrence. (*Rothr. Alask.*)

Var. **Johannis**, Regel.

? *D. laevipes*, DC. Hook. Fl. I., 53.

D. stellata. Macoun's Cat. No. 160.

Rocky Mountains, Lat. 52°-57°. (*Drummond.*) Bow River Pass; top of Mount Selwyn, Peace River Pass; Stuart Lake Mountain, B.C. (*Macoun.*)

wronce.

(*Drum-*
mestone
r Pass.
sburne.

Richard-

Ross.)

Parry.)
ountain,

ka, and

ass; top
in, B.C.

(171.)

Ar
frequ
(*Rich*
Fish 1

(172.)

Roe
Green

(173.)

Tabl
islands
(*Gray.*)

(174.)

Summ

(175.)

Labra
and Ne
Bow Ri
the Roe
Arct. Pl

Var. **c**

Nashv
coast. (C
in the pla
Richards

Var. **b**

D
D

North-v
and nume
Stuart La
St. Lawre

- (171.) **D. hirta**, Linn. Hook. Fl. I., 52.

D. oblongata, R. Br. Hook. Fl. I., 52.

Arctic and subarctic America as well as upon the Rocky Mountains ; frequent. Sea shores between the Mackenzie and Coppermine Rivers. (*Richardson.*) Igloodik and Barrow Rivers. (*Parry.*) Back's Great Fish River. (*Back.*) Greenland. (*Hook. Arct. Pl.*)

- (172.) **D. rupestris**, R. Br. Hook. Fl. I., 53.

B. hirta, var. 4. Hook. in Parry's Second Voy., 336.

Rocky Mountains, in stony places, Lat. 52°-57°. (*Drummond.*) Greenland. (*Hook. Arct. Pl.*)

- (173.) **D. androsacea**, Wahl.

D. Lapponica, Willd. Hook. Fl. I., 53.

D. hirta, var. 3, Hook. in Parry's Second Voy., 386.

Table-Topped Mountain, Gaspé, Q. (*O. D. Allen.*) Shores and islands of the Arctic Sea. (*Ross, Parry.*) Melville Island. (*Torr. & Gray.*) Greenland. (*Hook. Arct. Pl.*)

- (174.) **D. crassifolia**, Gray. Hook. Fl. I., 54.

Summits of the Rocky Mountains Lat. 52°-57°. (*Drummond.*)

- (175.) **D. incana**, Linn. Hook. Fl. I., 54.

D. glabella, Richards. Hook. Fl. I., 54.

Labrador. (*Pursh.*) Vicinity of Montreal. (*Provancher.*) Churchill and Nelson Rivers. (*R. Bell.*) Point Wilkins, Lake Winnipegosis. Bow River Pass, Rocky Mountains. (*Macoun.*) Margins of rivulets in the Rocky Mountains, Lat. 52°-57°. (*Drummond.*) Greenland. (*Hook. Arct. Pl.*)

Var. **confusa**, Poir. Torr. & Gray, Fl. I., 107.

D. confusa, Ehrh. Hook. Fl. I., 54.

Nashwaaksis, New Brunswick. (*Moser.*) Common along the Gaspé coast. (*Macoun.*) Rocky Mountains, from Lat. 52°; and northward in the plains, nearly to the mouth of the Mackenzie River. (*Drummond, Richardson.*) Bow River Pass, Rocky Mountains. (*Macoun.*)

Var. **borealis**, Torr. & Gray, Fl. I., 107.

D. borealis, DC. Hook. Fl. I., 55.

D. Unalaschkiana, DC. Hook. Fl. I., 55.

North-west coast of America. (*Menzies.*) Along the Nechacco River and numerous places along the Telegraph Trail between that river and Stuart Lake, B.C. (*Macoun.*) Eliguck Lake, B.C. (*Dawson.*) Garry, St. Lawrence and Ounalashka Island. (*Rothr. Alaska.*)

(176.) **D. arablesans**, Michx. Fl. II., 28.*D. glabella*, Pursh, 434. Hook. Fl. I., 54 in part.*D. Canadensis*, Brunet. Pl. Can. I., 22.

Gaspé Basin and along the Gaspé coast from Cape Rosier to Little Métis. (*Macoun*.) Crevices of rocks at St. Joachim. Cape Tourment, Q. (*Brunet*.) Lake Champlain. (*Michaux*.) Near Fenelon Falls, Ont. (*Dr. Cowdry*.) North shore of Lake Superior. (*Agassiz*.)

(177.) **D. aurea**, Vahl. Hook. Fl. I., 55.

Alpine prairies of the Rocky Mountains. (*Drummond*.) Top of Stuart Lake Mountain, B. C.; Mount Selwyn, Peace River Pass. (*Macoun*.) Eliguck Lake, B. C. (*Dawson*.) Greenland. (*Hook. Arct. Pl.*)

(178.) **D. nemorosa**, Linn. var. *a.*, **leiocarpa**, Lindb.*D. lutea*, Gilib. Hook. Fl. I., 55. Pl. Bourgeau, 254.

Low grounds from Lat. 56°-66°. (*Drummond*.) On dry sand hills and banks, Michipicotin, Lake Superior. Abundant in many places on the western plains, especially at Fort Ellice; Manitoba House, Lake Manitoba. (*Macoun*.) Cascade Mountains on Skagit River, B. C. (*Dawson*.)

Var. *β.*, **hebecarpa**, Lindb.*D. nemoralis*, Ehrh. Hook. Fl. I., 55.? *D. muralis*, Hook. Fl. I., 56.*D. lutea* var. *longipes*, Hook. in Lon. Journ. Bot., 671.

About Montreal. (*Cleghorn*.) About Rainy Lake and in the Rocky Mountains. (*Drummond*.) North-west coast of America. (*Douglas*.) Quite common around Victoria, Vancouver Island; in profusion at Yale and along the Wagon road to Quesnel, B.C. (*Macoun*.) Dean's Harbor, B. C. (*Dawson*.)

(179.) **D. Caroliniana**, Walt. Torr. & Gray, Fl. I., 109.*D. hispidula*, Michx, Fl. II., 28. Pursh, 433.? *Arabis reptans*, Torr. & Gray, Fl. I., 83.

On limestone rocks, Ox Point near Belleville; also on rocks west of Albert College and at the Ferry House opposite Belleville; Grape Island and the Carrying Place at the head of the Bay of Quinte; also in a stone quarry near the Canada Southern Railroad station at Amherstburg, and on Pelee Point, Lake Erie. (*Macoun*.)

(180.) **D. hyperborea**, Desv.*Alyssum hyperboreum*, Linn. Hook. Fl. I., 49.*Cochlearia spathulata*, Schlecht. Hook. Fl. I., 57.

Little
Four-
melon
ssiz.)

Top of
Pass.
Hook.

d hills
aces on
e, Lake
e, B. C.

Rocky
ouglas.)
sion at
Dean's

west of
; Grape
te; also
tion at

On
Geor
Va

Ro
(181.)

Pro
borho

(182.)

Tab.
(*Cham*
and As
(*Parry*
Bach.)
Aret. F

(183.)

Shore
(*Scoule*
River a

(184.)

Areti
River.
(*Rothr.*

(185.)

Labra

(186.)

Abund
abundant
(*Macoun.*

On the west coast of America. (*Pursh.*) Aleutian Islands of St. George and St. Paul, Lat. 56°-57°. (*Chamisso.*)

Var. **siliquosa**, Gray in Herb.

Cochlearia siliquosa, Schlecht. Hook. Fl. I., 57.

Rocky places in Ounalashka. (*Herb. Willd.*)

(181.) **D. verna**, Linn. Spring Whitlow Grass.

Erophila vulgaris, DC. Hook. Fl. I., 56.

Probably introduced from Europe. Fields and hill sides in the neighborhood of Quebec. (*Brunet.*) Cape Tourment, Q. (*Provancher.*)

52. COCHLEARIA, Tourn. (SCURVY-GRASS.)

(182.) **C. officinalis**, Linn. Official Scurvy-grass.

C. Greenlandica, Linn. Torr. & Gray, Fl. I., 110.

C. fenestrata, R. Br. Hook. Fl. I., 57. Torr. & Gray, Fl. I., 109.

C. oblongifolia, DC. Hook. Fl. I., 56. Torr. & Gray, Fl. I., 109.

Labrador. (*Brunet.*) Islands of St. Lawrence and Ounalashka. (*Chamisso.*) Kotzebue Sound. (*Lay.*) Norton Sound to Point Barrow and Assistance Bay. (*Rothr. Alask.*) Arctic shores. Whale Islands. (*Parry.*) Coast to the westward of Mackenzie River. (*Franklin & Back.*) Shores of the Arctic Sea. (*Ross.*) Greenland. (*Hook. Arct. Pl.*)

(183.) **C. Anglica**, Linn. English Scurvy-grass.

Shores of the Arctic Sea from east to west. Observatory Inlet. (*Scouler.*) Queen Charlotte Islands. (*Dawson.*) East of Mackenzie River and Greenland. (*Hook. Arct. Pl.*)

(184.) **C. Danica**, Linn. Danish Scurvy-grass.

Arctic Shores, North Somerset. (*Parry.*) Westward of Mackenzie River. (*Franklin & Back.*) Kotzebue Sound and Assistance Bay. (*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*)

(185.) **C. tridactylites**, Banks.

Labrador. (*Banks.*) Cape Charles, Labrador. (*Brunet.*)

53. ALYSSUM, Tourn. (ALYSSUM.)

(186.) **A. calycinum**, Linn.

Abundant along roadsides near London, Ont. (*Burgess.*) Very abundant around Brock's Monument, Queenston Heights, Ont., 1882. (*Macoun.*)

54. VESICARIA, Lam. (BLADDER-POD.)

(187.) **V. Ludoviciana**, DC. Western Bladder-pod.

? *V. arctica*, Pl. Bourgeau, 254.

Abundant in the valley of the Qu'Appelle in sand about a mile above its junction with the Assiniboine; on hills west of Moose Mountain. and sand hills near Gull Lake, N.W.T. (*Macoun.*) Dry hillsides near Badger Creek, N.W.T.; Similkameen Valley, B.C. (*Dawson.*)

(188.) **V. arctica**, Richards. Arctic Bladder-pod.

V. arctica, var. β . Hook. Fl. I., 48.

V. arenosa, Richards. in Frankl. Journ., 26.

Island of Anticosti, Q. (*Shepherd in Torr. & Gray.*) Chiefly confined to the Arctic shores and islands eastward of the Mackenzie River; on a hill 700 feet high at Bear Lake River. (*Richardson.*) Greenland. (*Hook. Arct. Pl.*)

(189.) **V. alpina**, Nutt. Alpine Bladder-pod.

Quite abundant on gravelly knolls on the top of the Cypress Hills. N.W.T. (*Macoun.*) Along Belly River. (*Dawson.*)

55. PHYSARIA, Nutt. (MOUNTAIN BLADDER-POD.)

(190.) **P. didymocarpa**, Gray.

Vesicaria didymocarpa. Hook. Fl. I., 49. Torr. & Gray, Fl. I., 102.

Growing in deep sand upon the Rocky Mountains, Lat. 52°-57°. (*Drummond.*) Rocky Mountains, near the 49th parallel, in gravel. (*Dawson.*) Rocky Mountains. (*Bourgeau.*) On shingle at the base of the mountain at the entrance to Bow River Pass. (*Macoun.*)

56. CAMELINA, Crantz. (FALSE FLAX.)

(191.) **C. sativa**, Crantz. False Flax.

Introduced from Europe. Found sparingly in cultivated fields and along railways from Nova Scotia to Manitoba and British Columbia.

57. BRAYA, Sternb. & Hoppe.

(192.) **B. alpina**, Sternb. & Hoppe, var. **Americana**.

Hook. Fl. I., 65. Torr. & Gray, Fl. I., 111.

bove
tain.
near

efined
r; on
land.

Hills.

D.)

102.
2°-57°.
travel.
ase of

s and
bia.

Alp
mond)

(b.)

Are
shores

(Richa

Island.

(193.)

Amo

Ounalas

Columb

(194.)

Found

Macken

(195.) **E**

I., 1

I

Arctic
River. (

St. Lawr

(196.) **S.**

Found
on Eagle
fruit, Sep

Alpine rivulets among the Rocky Mountains, Lat. 52°-57°. (*Drummond*).

(b.) Var. **glabella**, Watson's Index.

B. glabella, Richards. Hook. Fl. I., 65. Torr. & Gray, Fl. I., 111.

Platypetalum purpurascens, R.Br. Hook. Fl. I., 66. Torr. & Gray, Fl. I., 111.

P. dubium, R. Br. Hook. Fl. I., 66. Torr. & Gray, Fl. I., 111.

B. arctica, Hook. in Parry's Second Voy., 387.

Arctic America; on the Copper Mountains, and principally on the shores of the sea between the Mackenzie and Coppermine Rivers. (*Richardson*.) Arctic shores and islands of America. (*Ross*.) Melville Island. (*Sabine*.) Greenland. (*Hook. Arct. Pl.*)

(193.) **B. Eschscholtziana**, Benth. & Hook.

Oreus involuerata, Cham. Hook. Fl. I., 67.

Aphragmus Eschscholtzianus, Andr. Torr. & Gray, Fl. I., 112.

Among loose stones, on the high alpine mountains of the island of Ounalashka. (*Chamisso*.) Will possibly be found in northern British Columbia.

(194.) **B. pilosa**, Hook. Fl. I., 65. Torr. & Gray, Fl. I., 111.

Found only on the shores of the Arctic Sea, at the mouth of the Mackenzie River, Lat. 70°. (*Richardson*.)

58. EUTREMA, R. Br.

(195.) **E. Edwardsii**, R. Br. Hook. Fl. I., 67. Torr. & Gray, Fl. I., 112.

Draba (?) *levigata*, Cham. & Schlecht. Hook. Fl. I., 54. Torr. & Gray, Fl. I., 106.

Arctic sea shore and islands; coast eastward of the Coppermine River. (*Richardson, Back*.) Great Fish River. (*Back*.) Island of St. Lawrence. (*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*)

59. SUBULARIA, Linn. (AWL-WORT.)

(196.) **S. aquatica**, Linn. Gray, Manual, 73.

Found in about 3 feet of water, on sandy bottom in Vermilion Bay, on Eagle Lake, C. P. R., Dawson Route. Abundant, both in flower and fruit, Sept. 13, 1882. (*Fletcher*.)

60. CAPSELLA, Vent. (SHEPHERD'S PURSE.)

- (197.) **C. Bursa-pastoris**, Mœnch. Gray, Manual, 73.

Thlaspi Bursa-pastoris, Linn. Pursh., 435.

An introduced weed that is found in profusion wherever there is cultivation from the Atlantic to the Pacific. South Greenland. (*Hook. Arct. Pl.*)

- (198.) **C. divaricata**, Walp.

Hymenolobus divaricatus, Nutt. Torr. & Gray, Fl. I., 117.

H. erectus, Nutt. Macoun's Cat., No. 186.

Near Oregon Jack's, above Spence's Bridge, B.C., 1875.

61. THLASPI, Tourn. (PENNY-CRESS.)

- (199.) **T. arvense**, Linn. Mithridate Mustard.

Naturalized from Europe. Abundant in many parts of Quebec; scarce in Ontario; but a real pest in Manitoba and around all the Hudson Bay Co. Posts in the North-west Territory. This weed has attracted much attention already in Manitoba.

- (200.) **T. alpestre**, Linn. Hook. Fl. I., 58. Torr. & Gray, Fl. I., 114.

T. montanum, Hook. Fl. I., 58. Torr. & Gray, Fl. I., 113.

T. cochleariforme, DC. Hook. Fl. I., 58. Torr. & Gray, Fl. I., 113.

Shores of the Arctic Sea to the westward and eastward of the Mackenzie River. (*Franklin & Back.*)

62. SMELOWSKIA, C. A. Meyer.

- (201.) **S. calycina**, C. A. Meyer.

Hutchinsia calycina, Desv. Hook. Fl. I., 58. Torr. & Gray Fl. I., 114.

On the Rocky Mountains, Lat. 52°-57°. (*Drummond.*) Rocky Mountains, in the Bow River Pass. (*Bourgeois.*) Summit of South Kootanie Pass. (*Darson.*) Kotzebue Sound and Cape Kurzenstern. (*Rothr. Alash.*)

63. LEPIDIUM, Linn. (PEPPER-WORT.)

- (202.) **L. sativum**, Linn. Pepper-grass.

Escaped from cultivation. On waste heaps, Ste. Anne des Monts, Gaspé, Q. Frequent close to old Fort Garry, Winnipeg, Man.

cul-
book.

bec;
the
has

114.

Mac-

114.
foun-
Koo-
tern.

onts.

(2

ba
On

(20

Ni

(20

C

(20

T

very

Piet

Lak

part

Am

and

on F

B.C.

(207

In

Old C

Road

Road

(208

Ro

64.

(209

Int

(*Pow*

(203.) **L. ruderalis**, Linn.

Introduced. Windsor and Sidney Bar, N.S. (*How.*) Spreading from ballast heaps, New Brunswick. (*Fowler's Cat.*) Roadsides Hamilton, Ont. (*Buchan.*)

(204.) **L. campestris**, R. Br. Field Pepper-grass.

Introduced. Vicinity of Hamilton, Ont. (*Buchan.*) Clifton, near Niagara Falls. (*Macoun.*)

(205.) **L. Menziesii**, DC. Western Pepper-grass.

L. Californicum, Torr. & Gray, Fl. L., 115.

Common on rocks bordering on the sea at Victoria, Vancouver Island.

(206.) **L. intermedium**, Gray.

L. ruderalis, Richards, in Frankl. Journ. 16. Hook. Fl. L., 68. Torr. & Gray, Fl. L., 115.

L. Menziesii, var. β , Hook. Fl. L., 69.

This species and *L. Virginicum* have been so much confused that very little reliance can be placed on the stations given for the latter. Pietou, N. S. (*McKay.*) Vicinity of Montreal. (*McGill Coll. Herb.*) Lake Temiscamingue, 1870. (*J. Richardson.*) Very common in many parts of Hastings, Northumberland and Prince Edward counties, Amherstburgh and Pelee Island, Ont.; Little Current, Georgian Bay; and very abundant from Manitoba westward to the Rocky Mountains on Peace River. Spence's Bridge and along the Thompson to Lytton, B.C. (*Macoun.*) Rocky Mountains, Lat. 52°-56°. (*Drummond.*)

(207.) **L. Virginicum**, Linn. Virginia Pepper-grass.

Introduced from the South. Roadsides, Cape Souté, Q. (*Brunet.*) Old Citadel Hill, Montreal. (*Holmes.*) Near London, Ont. (*Burgess.*) Roadsides, Hamilton, Ont. (*Logie.*) Huron County, Ont. (*Gibson.*) Roadsides near Meyersburg, Northumberland County, Ont. (*Macoun.*)

(208.) **L. Draba**, Linn. Gray, Manual, 74.

Roadsides near Barrie, Ont. (*Spotten.*) This is likely a garden escape.

64. SENEBIERA, DC. (WART-CRESS. SWINE-CRESS.)(209.) **S. Coronopus**, Poir. Swine-cress.

Introduced in ballast. Spreading in ballast from St. John, N.B. (*Fowler's Cat.*) On the wharf, Gaspé Basin, Q. (*J. Bell.*)

(210.) **S. didyma**, Pers. Wart-cress.*Cochlearia lanifusa*, Michx. Fl. II., 27.*Coronopus didymus*, Pursh, 435.*Senecioera pinnatifida*, DC. Torr. & Gray, Fl. I., 114.

Introduced in ballast. Newfoundland. (*McGill Coll. Herb.*) Spreading from ballast at St. John, N.B. (*Fowler's Cat.*) On the wharf at Gaspé Basin, Q. (*J. Bell.*)

65. CAKILE, Tourn. (SEA ROCKET.)(211.) **C. Americana**, Nutt. American Sea Rocket.*C. maritima*, Pursh, 434.*C. edentula*, Hook. Fl. I., 59.*C. maritima*, var. *Americana*. Torr. & Gray, Fl. I., 119.

Common along the shores of the Maritime Provinces, on the shores of the Gulf of St. Lawrence and on many beaches along the river. Along the shores of the great lakes at intervals from Kingston to Thunder Bay.

66. RAPHANUS, Linn. (RADISH.)(212.) **R. Raphanistrum**, Linn. Wild Radish.

Introduced from Europe. Annapolis, N.S. (*McKay.*) A troublesome weed at Fredericton, N.B., and a few other places. (*Fowler's Cat.*) Barrie, Lake Simcoe, Ont. (*Buchan.*)

(213.) **R. sativus**, Linn. Garden Radish.

Spontaneous on waste heaps and frequent around market gardens. Seldom remains more than two years.

67. THELYPODIUM, Endl. (PURPLE ROCKET.)(214.) **T. pinnatifidum**, Watson.*Hesperis* (?) *pinnatifida*, Michx. Fl. II., 31.*Chieranthus hesperidoides*, Torr. & Gray, Fl. I., 72.*Arabis hesperidoides*, Gray, Manual, 68.

Found at Montebello, on the Lower Ottawa, around springs, June, 1881. (*R. B. Whyte.*) This species is far out of its range and may have been introduced.

nd-
at

res
er.
to

le-
r's

is,

e,
y

(21

Isle

(216

On
the
thro
culti

(217

Co
be fo

(218,

St.
Coll.
at K
(*Logia*
Detro
Ont.
Gull a
Wood

68. THYSANOCARPUS, Hook.(215.) **T. curvipes**, Hook. Fl. L., 69.*T. elegans*, Fisch. & Meyer. Torr. & Gray, Fl. L., 118.*T. pulchellus*, Fisch. & Meyer. Torr. & Gray, Fl. L., 118.

Abundant on dry hill sides in the vicinity of Victoria, Vancouver Island, 1875.

XI. CAPPARIDACEÆ. CAPER FAMILY.

69. CLEOME, Linn. (CLEOME. SPIDER-FLOWER.)(216.) **C. integrifolia**, Torr. & Gray, Fl. L., 122.*C. serrulata*, Pursh. 441. Torr. & Gray, Fl. L., 121.

On dry saline soil from Woody Mountain, along the 49th parallel to the Rocky Mountains. (*Dawson*.) Abundant on many dry clay soils throughout the Great Plains. A beautiful flower and well worthy of cultivation.

(217.) **C. lutea**, Hook. Fl. L., 70.*C. aurca*, Nutt. Torr. & Gray Fl. L., 122.

Common in North-west America. (*Douglas*.) This species ought to be found in southern British Columbia.

70. POLANISIA, Raf. (POLANISIA.)(218.) **P. graveolens**, Raf. Heavy-scented Polanisia.*Cleome dodecandra*, Michx. Fl. II., 32. Pursh, 441.

St. Helen's Island, Montreal. (*Holmes*.) St. John's, Q. (*McGill Coll. Herb.*) Lake Champlain. (*Bigelow*.) Border of Lake Ontario at Kingston. (*Brunet*.) Burlington Beach, Hamilton; common. (*Logie*.) Port Colborne, Lake Erie. (*McGill Coll. Herb.*) Mudden, Detroit River. (*MacLagan*.) Abundant on the sands at Niagara town, Ont. Common on the shores of Long Lake, near Last Mountain, and at Gull and Island Lakes, north of the Cypress Hills, N.W.T. (*Macoun*.) Wood End, Souris River, N.W.T. (*Dawson*.)

XII. CISTACEÆ. ROCK-ROSE FAMILY.

71. **HELIANTHEMUM, Tourn. (ROCK-ROSE.)**(219.) **H. Canadense, Michx.** Fl. I., 308. Frost-weed.*H. ranunculiflorum, Michx.* Fl. I., 307.*H. rosmarinifolium, Pursh,* 364.*H. corymbosum, Pursh* 363.

Dry, sandy, or gravelly soil, east of Belleville; very common on Rice Lake plains; St. James' Cemetery, Toronto; vicinity of London. Ont.; Pointe-aux-Pins, Lake Superior; Fort Francis, Rainy River. (*Macoun.*) Galt, Ont. (*Miss Crooks.*) Sandwich, Ont. (*MacLagan.*) Sandy plains of the Rivière aux Sables, Lambton Co., Ont. (*Gibson.*) Plains of the Saskatchewan. (*Bourgeau.*) Last reference doubtful.

72. **HUDSONIA, Linn. (HUDSONIA.)**(220.) **H. tomentosa, Nutt.** Downy Hudsoniana.*H. ericoides, Richards.* in Frankl. Journ., 11.

Sandy shores of lakes and rivers. Northwest Arm near Halifax, N.S. (*Sommers.*) Abundant on Kouchibouguac beach, N.B. (*Fowler's Cat.*) Anticosti and St. Laurent, Q. (*Brunet.*) Port Colborne, Lake Erie. (*McGill Coll. Herb.*) Pointe-aux-Pins, Montreal and Sandy Islands, Lake Superior; Fifteen-Mile Point, Rainy Lake, and Hungry Hall, entrance to the Lake of the Woods; sand hills west of Fort Pitt, N. W. T. (*Macoun.*) From Lake Huron to as far north as Slave Lake, in several places. (*Richardson.*)

(221.) **H. ericoides, Linn.**McNab's Island, Halifax, N.S. (*Sommers.*)73. **LECHEA, Linn. (PINWEED.)**(222.) **L. major, Michx.** Greater Pinweed.*L. villosa, Ell.* Hook. Fl. I., 72.

Dry woods in sterile soil. Sandy woods a mile south of Port Dover Junction, Canada Southern Railway, Ont. (*Macoun.*) Near London, Ont. (*Burgess.*)

on on
ndon.
river.
(*gan.*)
(*son.*)
il.

N.S.
(*at.*)
Erie.
nds,
Iall,
Pitt,
ake,

over
lon,

(2

(2

(1

Vi

de

Br

Pl

san

mi

au

No

(22

N

(22

O

in t

(22

M

(For

Lak

Lak

(228

D

du T

Quel

- (223.) **L. thymifolia**, Pursh. Thyme-leaved Pinweed.

On Goat Island, Grand Lake. New Brunswick. (*Fowler's Cat.*)

- (224.) **L. minor**, Walt. Lesser Pinweed.

Dry sandy fields and open grassy woods. Kouchibouguac beach, N.B. (*Fowler's Cat.*) Three Rivers, Q.; and Sandwich, Ont. (*MacLagan.*) Vicinity of Hamilton. (*Buchan.*) Not common at London. (*Saunders.*) Rivière aux Sables, Lambton Co., Ont. (*Gibson.*) West of Brockville, Ont. (*Billings.*) Bay of Quinte, near Picton; Rice Lake Plains; Heely's Falls, Northumberland Co.; rare east of Belleville; sandy woods, Gull Lake, Addington Co.; St. Norah's Lake, eighty-four miles north of Lindsay, Ont.; St. James' Cemetery, Toronto; Pointe-aux-Pins, Lake Superior; Sturgeon Lake, Dawson Route. (*Macoun.*) North side of Lake Winnipeg. (*Drummond.*)

XIII. VIOLACEÆ. VIOLET FAMILY.

74. **IONIDIUM**, Vent. (GREEN VIOLET.)

- (225.) **I. concolor**, Benth. & Hook.

Viola concolor, Forst. Pursh, 175.

Solva concolor, Ging. Torr. & Gray, Fl. I., 144.

Noisettia acuminata, DC. Torr. & Gray, Fl. I., 136.

Near London, Ont., 1882. (*Burgess.*)

75. **VIOLA**, Linn. (VIOLET. HEART'S EASE.)

- (226.) **V. rotundifolia**, Michx. Round-leaved Violet.

Cape Terry, N.S. (*How.*) Near Brome Lake and other localities in the Eastern Townships. (*McGill Coll. Herb.*)

- (227.) **V. lanceolata**, Linn. Lance-leaved Violet.

Marshy meadows and by streams. On the shore at Rothsay, N.B. (*Fowler's Cat.*) Halifax and Annapolis, N. S. (*McKay.*) Muskoka Lake, Ont. (*Burgess.*) In rear of St. Mary's Village, Sault Ste. Marie, Lake Superior, 1869. (*Macoun.*) About Lake Huron. (*Todd.*)

- (228.) **V. primulæfolia**, Linn. Primrose-leaved Violet.

Damp soil and wet meadows. St. Andrew's, N.B. (*Vroom.*) Rivière du Loup, Q.; not uncommon. (*Thomas.*) Reported by others from Quebec, but localities not given.

(229.) **V. blanda**, Willd. Sweet White Violet.*V. clandestina*, Pursh, 173. Hook. Fl. I., 77.*V. obliqua*, Pursh, 172, not Ait.

Very abundant in damp, mossy places from Newfoundland and Nova Scotia to British Columbia, and north on the Mackenzie to Fort Franklin. There are many forms of this species which require careful study, and possibly two species may be found under one name.

(230.) **V. renifolia**, Gray. Kidney-leaved Violet.

Dry cedar swamps and rich woods in ravines. Too often confounded with the preceding species, though with a different habit, having much larger and very pubescent leaves, which often become two inches across in summer. It is abundant in all our cedar swamps and mossy woods, and extends into British Columbia.

(231.) **V. biflora**, Linn.

Reported from the Arctic Coast. A species which seemed to accord with this was detected near Stuart Lake, B.C., in 1875.

(232.) **V. odorata**, Linn. English Sweet Violet.

Escaped from gardens, N.S. (*McKay*.) Escaped from cultivation at Victoria, Vancouver Island. (*Macoun*.)

(233.) **V. palustris**, Linn. Marsh Violet.

Wet swamps, amongst moss. Mount Albert, Gaspé, Q. (*O. D. Allen*.) One mile west of Prince Arthur's Landing, Dawson Road, Lake Superior, 1872. (*Macoun*.) Near Oxford House, north of Lake Winnipeg. (*R. Bell*.) From Vancouver Island to the forks of Peace River, Lat. 56°. (*Macoun*.) This species is easily distinguished from *V. blanda* by its pale lilac flowers and articulated rhizoma.

(234.) **V. Selkirkii**, Pursh. Great-spurred Violet.

Clifton, on the Kennebecasis, N.B. (*Wetmore*.) Near Half Moon Lake, St. John. St. Francis River, N.B. (*Hay*.) Damp and shady soil. Vicinity of Windsor, N.S. (*McGill Coll. Herb*.) Hilly ground about Montreal. (*Goldie*.) Island of Montreal. (*Holmes*.) Gate Lake, Wentworth Township, Q. (*D'Urban*.) Rivière du Loup, Q. (*Thomas*.) Dartmouth River, Gaspé. (*J. Bell*.) Ste. Anne des Monts, River, Gaspé. (*Macoun*.) McLeod's Harbor, Lake Huron. (*J. Bell*.) Walkerton and Owen Sound. (*Buchan*.) Woodstock, Ont. (*Burgess*.)

(235.) **V. cucullata**, Ait. Common Blue Violet.

Wet meadows, or borders of brooks in woods. Very common from the Atlantic to the Pacific. This species needs to be carefully examined, as there are many varietal forms in the north and west.

Nova
Fort
reful

nded
much
cross
oods,

ecord

ation

. D.
load,
Lake
eace
from

loon
ady
bund
ake,
nas.)
iver,
tell.)
ess.)

from
ned,

S
Am
(236

D
rare
(*Pr*
(*Me*
com
Vici
(237

C
Man
53°
Mou
(238

Isl
(239

Ric
small
Amh
Near
(240

Bon
to the

Var. **cordata**, Gray, Manual, 78.

V. villosa, Walt. Torr. & Gray, Fl. L., 128.

V. sororia, Willd. Pursh, 173.

Dry rocky hillside under poplars near the paper mill, Belleville, Ont.

Var. **palmata**, Gray, Manual, 78.

V. palmata, Linn. Hook. Fl. L., 74.

V. septemloba, La Conte. Torr. & Gray, Fl. L., 137.

Swamps and low grounds, western Ontario. Damp woods near Amherstburg, Ont. (*Macoun.*)

(236.) **V. sagittata**, Ait. Arrow-leaved Violet.

V. primulifolia, Pursh, 173, not Linn.

V. dentata, Pursh, 172.

V. ovata, Nutt. Hook. Fl. L., 76.

Dry, sandy and gravelly fields, woods, copses, and pastures, rather rare. Nun's Island, Berthier, Q. (*Holmes.*) Lorette, Stansfeld, Q. (*Provancher.*) Jones' Falls, Rideau Canal; and Amherstburg, Ont. (*Maclean.*) Sandy fields near Belleville; Rice Lake plains, Ont.; common around Toronto; at Port Dover Junction, Ont. (*Macoun.*) Vicinity of London. (*Burgess.*)

(237.) **V. pedata**, Linn. Bird-foot Violet.

V. digitata, Pursh, 171.

V. pinnata, Richards. in Frankl. Journ., 76.

Common throughout Manitoba as far west as Brandon and north to Manitoba House, on Manitoba Lake. (*Macoun.*) As far north as Lat. 53° on the Saskatchewan. (*Richardson.*) Near Emerson and Pembina Mountain. (*Dawson.*)

(238.) **V. Langsdorffii**, Fisch. Hook. Fl. L., 77.

Island of Ounalashka. (*Chamisso.*) Since found in Alaska. (*Rothrock.*)

(239.) **V. striata**, Ait. Pale Violet.

V. debilis, Michx. Fl. L., 150.

V. ochroleuca, Schwein. Hook. Fl. L., 77.

Rich low grounds along streams. Very abundant in the valley of a small stream on the Canada Southern Railway, a few miles east of Amherstburg, Ont. (*Macoun.*) Common near Hamilton, Ont. (*Logie.*) Near London, Ont. (*Burgess.*)

(240.) **V. canina**, Linn. Var. **sylvestris**, Regel. Dog Violet.

V. debilis, Pursh, 174, not Michaux.

V. Muhlenbergii, Torr. Hook. Fl. L., 78.

Borders of brooks and damp shady woods. Common from the Atlantic to the Pacific. (*Macoun.*) South Greenland. (*Hook. Arct. Pl.*)

Var. **rupestris**, Regel. Mountain Violet.

V. Muhlenbergii vars. β & γ . Hook. Fl. I., 78.

Prairies among the Rocky Mountains, rare. (*Drummond*.)

Var. **adunca**, Gray. Western Dog Violet.

V. adunca, Smith. Hook. Fl. I., 79.

V. longipes, Nutt. Torr. & Gray, Fl. I., 140.

On dry prairies or dry soil generally. Frequent on the western plains, especially south of Battleford. The common Dog Violet of British Columbia. All the forms of this species need careful examination.

(241.) **V. rostrata**, Muhl. Long-spurred Violet.

Montreal Mountain. (*McGill Coll. Herb.*) Rocky woods and shaded hillsides. Reported in various places throughout Ontario, from Ottawa to Owen Sound.

(242.) **V. Canadensis**, Linn. Canada Violet.

Rich woods from Newfoundland and Quebec to British Columbia. Throughout Ontario it is very abundant, and in the forest country north of the great prairie it is quite frequent. (*Macoun*.) Near Woodstock, N.B. (*Chalmers*.)

(243.) **V. pubescens**, Ait. Downy Violet.

V. Pennsylvanica, Michx. Fl. II., 149.

Rich low woods from Newfoundland, Nova Scotia and New Brunswick, throughout Quebec and Ontario to Manitoba House and Lake Manitoba. Hooker says it extends to the mountains, but I have never detected it outside of Manitoba.

Var. **eriocarpa**, Nutt. Hook. Fl. I., 80.

Vicinity of Ottawa. (*Fletcher Fl. Ott.*) This seems to be the common form at Belleville. (*Macoun*.)

Var. **scabriuscula**, Torr. & Gray, Fl. I., 142.

Billings Bridge, Ottawa. (*Fletcher*.) Damp, clayey soil near Amherstburg, Ont. (*Macoun*.) Collectors might endeavour to define the limits of the three forms.

(244.) **V. glabella**, Nutt. Western Yellow Violet.

V. striata. Hook. in Lond. Journ. Bot., 6.

V. biflora, var. *Sitchensis*, Regel. Rotir. Alask., 444.

Rich moist woods from Yale to McLeod's Lake, B.C. (*Macoun*.) Drew's Harbor and Salmon River, B.C. (*Dawson*.) Rich woods near Yale, also at Port Moody, B.C., 1883. (*Hill*.)

ins.
fish

ded
awa

bia.
ntry
ood-

ins-
ake
ver

the

am-
the

m.)
ear

(245)

Va
Frasc
(*Hill*)

(246)

On
Sasku

Vau

Abu
(*Maco*)

(247.)

In a
ground
1882.

One s
by J. A
biflora,
to ident

Descr
cream c
scabrous
crenate,
ciliate a

(248.) **P**

Dry ro
(*Douglas*,

- (245.) **V. sarmentosa**, Dougl. Hook. Fl. L., 80.

Vancouver Island near Victoria, also in numerous places up the Fraser along the wagon-road, B.C. (*Macoun*.) Close to Yale, B.C. (*Hill*.)

- (246.) **V. Nuttallii**, Pursh, 174.

On dry soil from near Winnipeg to Carlton and Edmonton on the Saskatchewan. This species seems local in its distribution.

Var. **præmorsa**, Watson.

V. linguefolia, Nutt. Torr. & Gray, Fl. L., 141.

Abundant in open grassy places around Victoria, Vancouver Island. (*Macoun* & *Hill*.)

- (247.) **V. tricolor**, Linn. Var. **arvensis**, Ging. Pansy Violet.

V. bicolor, Pursh, 175.

V. tenella, Muhl. Cat. 25.

In a field at Ottawa. (*Fletcher*.) Very abundant on dry rocky ground near the stone quarry at the north end of Pelee Island, Ont., 1882. (*Macoun*.) Lake Huron. (*Provancher*.)

Doubtful Species.

One specimen of a remarkable violet was sent from British Columbia, by J. A. Hill of the C. P. R. staff, which may possibly be the rare *V. biflora*. Not being able to find a description of this species, I am unable to identify it satisfactorily.

DESCRIPTION.—Stems apparently two-flowered; flowers yellow or cream color; leaves short, tapering into the petiole which is winged, scabrous on both sides, but especially on the prominent veins; margins crenate, slightly scabrous ciliate; stipules membranous, acute, slightly ciliate at the tip; sepals white margined and ciliate.

XIV. POLYGALACEÆ. MILK-WORT FAMILY.

76. POLYGALA, Tourn. (MILK-WORT.)

- (248.) **P. incarnata**, Linn.

Dry rocky soil. Rocky places on the Niagara River, near the Falls. (*Douglas*, 1823.) Not detected by later collectors.

(249.) ***P. sanguinea***, Linn.*P. purpurea*, Nutt. Torr. & Gray, Fl. I., 127.*P. viridescens*, Linn. Pursh, 465.

Sandy and moist ground. Sandwich, Ont. (*MacLagan*.) Point Pelee, Ont. (*Burgess*.) Dry ground, vicinity of Hamilton, and Prince's Island, Ont. (*Logie & Buchan*.)

(250.) ***P. verticillata***, Linn.

Dry gravelly or sandy soil. Boucherville Island, River St. Lawrence. (*Holmes*.) Vicinity of Montreal. (*McGill Coll. Herb.*) Between Sandwich and Amherstburgh, Ont. (*Douglas*.) On the Canada Southern Railway, north of the Great Western Crossing, Queenston Heights. (*Macoun*.)

(251.) ***P. Senega***, Linn. Seneca Snake-Root.

Rocky soil, and sandy woodlands. * Aroostook Falls and Tobique Narrows, Victoria Co., N.B. (*Hay & Wetmore*.) From the vicinity of Ottawa (*Fletcher*), throughout Ontario and westward across the plains to the Rocky Mountains. (*Macoun*.)

(252.) ***P. polygama***, Walter, 179.*P. rubella*, Willd. Pursh, 464.

Dry sandy soil. Dutch Village, N.S. (*Sommers*.) Rice Lake Plains; sand hills along the Humber near Toronto. (*Macoun*.) Woods in the vicinity of London, Ont. (*Burgess*.) Lake of the Woods. (*Dawson*.)

(253.) ***P. pauciflora***, Willd.*P. uniflora*, Michx. Fl. II., 53. Hook. Fl. I., 87.

Dry or moist sandy soil, generally in pine woods. Fredericton Junction, N.B. (*Bailey*.) Island of Montreal. (*Holmes*.) Near St. Louis Dam, Ottawa. (*H. Ami*.) Davie's Locks on the Rideau Canal near Kingston. (*MacLagan*.) Komoka, near London, Ont. (*Burgess*.) Near Lake Medad, Ont. (*Logie*.) Cockburn Island, Lake Huron. (*J. Bell*.) Abundant in the County Northumberland at Trenton, Wooler, Murray Townhall, Castleton, and Colborne; banks of the Humber near Toronto; Port Dover Junction, Ont.; Point aux Pins and Kaministiquia River, Lake Superior. (*Macoun*.) Saskatchewan Plains. (*Bourgeau*, [?].)

Excluded Species.

Polygala fastigiata, said to have been found by Judge Logie at Hamilton, and *P. Nuttallii* mentioned as occurring in the same neighborhood by Mr. Buchan, are included in *P. sanguinea*.

Pelee,
Island,

rence.
etween
Canada
eenston

obique
nity of
e plains

Plains;
s in the
wson.)

St. Lawrence River opp the Port of Montreal

ericton
ear St.
Canal
urgess.)
on. (J.
Wooler,
umber
l Kam-
Plains.

Hamil-
orhood

(255.)

W
1823

(255.)

In
and I
clear
bee, s
Fl. O
ton, C
cott, C

(256.)

To

(257.)

To

(258.)

Com
(*Fletch*
Vanco
Ottawa

(259.)

Open
(*Macla*

(260.)

Ocea
taneous
(*Macom*
of Ottav
(*Todd.*)

XV. CARYOPHYLLACEÆ. PINK FAMILY.

77. **SILENE**, Linn. (CATCH-FLY. CAMPION.)

- (254.)
- S. stellata**
- , Ait.

Cucubalus stellatus, Linn. Michx. Fl. I., 271.

Wooded banks. Dry stony places on the Niagara River. (*Douglas*, 1823.) Not detected lately.

- (255.)
- S. inflata**
- , Smith. Bladder Campion.

Cucubalus Behen, Linn. Michx. Fl. I., 271.

Introduced into meadows and waste places. Miramichi, Richibucto, and Edmundon, N.B. (*Fowler's Cat.*) Extremely abundant in all old clearings throughout the Gaspé Peninsula and rather common in Quebec, scarce at Belleville, Ont. (*Macoun.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Neighborhood of Prescott, Ont., rare. (*Billings.*) Hamilton, Ont. (*Logie.*) Near London, Ont. (*Burgess.*) L'Orignal, Prescott, Co. Ont. (*J. Bell.*)

- (256.)
- S. Douglasii**
- , Hook. Fl. I., 88.

To be looked for in Southern British Columbia.

- (257.)
- S. Scouleri**
- , Hook. Fl. I., 88.

To be looked for in Southern British Columbia.

- (258.)
- S. antirrhina**
- , Linn. Sleepy Catchfly.

Common amongst rocks and on sandy soil. Vicinity of Ottawa (*Fletcher*), throughout Ontario, and westward across the plains to Vancouver Island. It has never been reported from any point east of Ottawa.

- (259.)
- S. Virginica**
- , Linn. Fire Pink.

Open woods. Lake Huron. (*Todd.*) Islands in Detroit River. (*Maclean.*) Confined to southwestern Ontario.

- (260.)
- S. Armeria**
- , Linn. Garden Catchfly.

Occasionally spontaneous in gardens, N.B. (*Fowler's Cat.*) Spontaneous in some gardens at Belleville and near Campbellford, Ont. (*Macoun.*) Vicinity of Arnprior, Ont. (*McGill Coll. Herb.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Pentanguishene on the Georgian Bay. (*Todd.*)

(261.) **S. noctiflora**, Linn. Night-flowering Catchfly.

Introduced sparingly into fields and gardens. A weed in gardens, N.S. (*Lawson*.) A rare weed in cultivated grounds, N.B. (*Fowler's Cat.*) Frequent in cultivated grounds Quebec and Ontario, also at Winnipeg, Manitoba.

(262.) **S. Menziesii**, Hook. Fl. I., 90.

S. stellaroides, Nutt. Torr. & Gray, Fl. I., 193.

Belly River, N.W.T. (*Burgess*.) Vancouver Island near Victoria; Blackfoot Crossing of Bow River; Cypress Hills at Fort Walsh; at a salt spring near the mouth of Red Deer River, at the head of Lake Winnipegosis, N. W. T. (*Macoun*.) North-west coast of America. (*Menzies*.) Woods near Port Moody, B. C. (*Hill*.) Portage D'Embaras, Slave River. (*Richardson*.)

(263.) **S. acaulis**, Linn. Moss Campion.

St. Paul's Island, and Cape Breton Island. (*McKay*.) Top of Mount Albert, Shickshock Mountains, Gaspé, Q. (*Macoun*.) Coast of Labrador. (*Butler*.) Throughout the whole of Arctic and Subarctic America, and from Labrador to Behring's Straits. (*Hooker*.) Elevated parts of the Rocky Mountains, Lat. 52°-56°. (*Drummond*.) Kootanie Pass near the 49th parallel. (*Dawson*.) Bow River Pass; Mount Selwyn, Peace River Pass. (*Macoun*.) Cariboo Mountains, B. C. (*Cowley*.) Kotzebue Sound, Cape Lisburne, and Youcon River banks. (*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*)

Excluded Species.

Silene Pennsylvanica is mentioned in Hooker's Fl. I., 90, as occurring on rocky islands on the north side of Lake Erie, but he states that he had not seen the specimens. As *S. Virginica* has been found in the same vicinity, if not in the very same locality, I consider the latter species as the one meant.

78. LYCHNIS, Tourn. (LYCHNIS, COCKLE.)(264.) **L. apetala**, Linn.

Labrador. (*Morrison*.) At Fort Norman, near the Arctic Circle. (*Richardson*.) - Abundant everywhere beyond the Arctic Circle and as far west as Behring's Straits. (*Hooker*.) On the more elevated parts of the Rocky Mountains, Lat. 52°-56°. (*Drummond*.) Bow River Pass;

rdens,
arter's
also at

etoria;
; at a
Lake
merica.
D'Em-

Mount
f Lab-
aretic
evated
otanie
Mount
B. C.
banks.

urring
hat he
in the
latter

Cirele.
and as
l parts
Pass:

on 2
Bay
V

B
(265)

Fa
west
M. I
Koot
(Bou
(266.

W
rison.
top of
land.
(267.

Pla
grave
(268.)

Con
cultiva
(269.)

A w
Saint
Vicini
Co., Or
(270.)

Intro
Ottawa
(271.)

Camp

on Mount Selwyn, Peace River Pass. (*Macoun.*) York Factory, Hudson's Bay. (*R. Bell.*) Greenland. (*Hook. Arct. Pl.*) Gulf of Boothia. (*Back.*)

Var. **glabra**, Regel.

L. apetala, Pl. Bourgeau, 255.

Bow River Pass, Rocky Mountains. (*Bourgeau.*)

(265.) **L. elata**, Watson. (New Species.)

Silene Scouleri, Pl. Bourgeau, 255.

Found by Lyall somewhere on the International boundary on the western side of the Rocky Mountains. In the summer of 1881, Dr. G. M. Dawson obtained a number of fine specimens at the summit of the Kootanie Pass on the east side of the Mountains. Bow River Pass. (*Bourgeau.*)

(266.) **L. alpina**, Linn.

West coast of Newfoundland. (*McGill Coll. Herb.*) Labrador. (*Morrison.*) Ungava Bay, Labrador. (*Barnston.*) Very abundant on the top of Mount Albert, Shickshock Mountains, Gaspé. (*Macoun.*) Greenland. (*Hook. Arct. Pl.*)

(267.) **L. Drummondii**, Watson.

Silene Drummondii, Hook. Fl. L., 89.

Plains of the Saskatchewan. (*Richardson.*) Very abundant on dry gravelly ridges from near Fort Ellice to the Rocky Mountains, N.W.T.

(268.) **L. Githago**, Lam. Corn-Cockle.

Agrostemma Githago, Linn. Hook. Fl. L., 92.

Common in wheat-fields as a pernicious weed. Wherever wheat is cultivated this weed is found in abundance.

(269.) **L. vespertina**, Smith. Evening Lychnis.

A weed in a few gardens and waste places. Annapolis, N.S. (*How.*) Saint Stephen, N. B. (*Vroom.*) Scarcely established in Ontario. Vicinity of London, Ont. (*Burgess.*) Township of Stanley, Huron Co., Ont. (*Gibson.*)

(270.) **L. dioica**, Linn.

L. diurna, Linn. Wood. Bot. & Fl., 54.

Introduced in Nova Scotia at Kentville. (*Lawson.*) Vicinity of Ottawa. (*Fletcher. Fl. Ott.*) East Greenland. (*Hook. Arct. Pl.*)

(271.) **L. Flos-cuculi**, Linn. Ragged Robin.

Campbellton, New Brunswick. (*Chalmers.*) Doubtless introduced.

(272.) **L. affinis**, Vahl.

Melandryum involueratum, var. *affine*, Rohrb. Watson. King's Rep. V., 431.

Greenland and Labrador. (*Watson.*)

79. DIANTHUS, Linn. (PINK. CARNATION.)(273.) **D. Armeria**, Linn. Deptford Pink.

Introduced into the waste ground between Niagara Falls and the Canada Southern Railway. (*Macoun.*)

(274.) **D. alpinus**, Linn. var. *repens*, Regel.

D. repens, Willd. Hook. Fl. I., 87.

Bay of Pechscholtz. (*Chamisso.*) Kotzebue Sound. (*Beechy.*) Norton Sound, Cape Lisburne, and Youcon River banks. (*Rothr. Alaska.*)

80. SAPONARIA, Linn. (SOAPWORT.)(275.) **S. officinalis**, Linn. Bouncing Bet.

Introduced into gardens and escaped into waste places along lanes and garden fences. Twelve-mile House near Halifax, N.S. (*Lawson.*) Queensbury Parsonage, N.B. (*Bailey.*) Montreal Mountain, Lachine and St. Andrews, Q. (*McGill Coll. Herb.*) Vicinity of London, Ont. (*Saunders.*) Hamilton, Ont. (*Logie.*) Very common along roadsides in Hastings, Prince Edward and Northumberland Counties, Owen Sound and St. Thomas, Ont. (*Macoun.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*)

(276.) **S. Vaccaria**, Linn. Common Cow-Herb.

Vaccaria vulgaris, Host. Gray, Manual, 88. Macoun's Cat., No. 242.

Introduced along railways and rarely in cultivated fields. In waste lots in Ottawa. (*Fletcher Fl. Ott.*) In gardens and waste places at Belleville and Owen Sound, Fort Francis, Rainy Lake and around Winnipeg. Fort Walsh, Cypress Hills. (*Macoun.*)

81. ARENARIA, Linn. (SANDWORT.)(277.) **A. capillaris**, Poir, var. *nardifolia*, Regel.

A. nardifolia, Ledeb. Hook. Fl. I., 98.

A. formosa, Hook. Nos. 254, 258 & 260, Macoun's Cat.

Shores of the Arctic Sea. (*Richardson.*) Cascade, Kootanie, and

ep. V.,

d the

orton

lanes

erson.)

chine

Ont.

lsides

Owen

etcher

242.

waste

ees at

round

, and

Roc

(De

(Me

(27

O

Alon

(279

A

(Ma

tains

Va

Sh

Heel

(Rot

(280.

Cor

Moun

(281.

Cap

Newf

Gaspé

Between

River

and S

Green

Var

Peti

Percé

Mount

Rocky Mountains. (*Lyall*.) Rocky Mountains in the Kootanie Pass. (*Dawson*.) Mountain behind the hotel at Spence's Bridge, B. C. (*Macoun*.)

(278.) **A. congesta**, Nutt., var. **sub-congesta**, Watson.

On gravelly slopes about the centre of the Cypress Hills. (*Macoun*.) Along Belly River, N.W.T., 1881. (*Dawson*.)

(279.) **A. arctica**, Stev.

A. laricifolia, Pursh. Hook. Fl. I., 98.

Abundant on top of Mount Albert, Shickshock Mountains, Gaspé, Q. (*Macoun*.) Shores of the Arctic Sea. (*Richardson*.) Tzi-tzult Mountains, B.C. (*Dawson*.)

Var. **breviscapa**, Regel.

A. arctica, var. β . *grandiflora*, Hook. Fl. I., 100.

A. pumilio, R.Br. Hook. Fl. I., 100.

Shores of the Arctic Sea. (*Richardson*.) On one of the islands in Hecla and Fury Straits. (*Ross*.) Kotzebue Sound to Cape Lisburne. (*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*)

(280.) **A. biflora**, var. **obtusa**, Watson.

A. arctica, var. *stenopetala*, Hook. Fl. I., 100.

A. arctica, var. γ (*obtusa*), Torr. & Gray, Fl. I., 181.

Coast west of the Mackenzie River. (*Richardson*.) Top of Rocky Mountains in the Kootanie Pass. (*Dawson*.)

(281.) **A. verna**, Linn. Hook. Fl. I., 99.

A. juniperina, Pursh. Hook. Fl. I., 98.

Cape Charles and Amour Bay, Labrador. (*Brunet*.) Labrador and Newfoundland. (*Pursh*.) On Mount Albert, Shickshock Mountains, Gaspé. On Percé Mountain and Percé Rock, Bay of Chaleur. (*Macoun*.) Between Norway House and Cumberland House. (*Richardson*.) Bow River Pass, Rocky Mountains. On the Nechaco River at the Ford, and Stuart Lake Mountain, B.C. (*Macoun*.) York Factory. (*Bell*.) Greenland. (*Hook. Arct. Pl.*)

Var. **hirta**, Watson. King's Rept. V., 41.

A. hirta, Wormsk. Hook. Fl. I., 99.

A. propinqua, Richards. Hook. Fl. I., 99. Macoun's Cat., No. 255.

Petit Portage, Gaspé, on rocks. (*J. Bell*.) Percé Mountain and Percé Rock, Bay of Chaleur; also top of Mount Albert, Shickshock Mountains, Gaspé. (*Macoun*.) Barren grounds north of Lat. 54° to the

Arctic Sea. (*Richardson.*) Summits of the Rocky Mountains. (*Drummond.*) Bow River Pass. (*Bourgeau.*) Cypress Hills, N.W.T.; Stuart Lake Mountain, B.C., and Mount Selwyn, Peace River Pass. (*Macoun.*) Along the western shores of northern Alaska. (*Rothr. Alask.*)

Var. **rubella**, Hook.

A. quadrivalvis, R.Br., in Parry's 1st Voy., 271.

A. rubella, Hook. Fl. I., 100.

Top of Mount Albert, Shickshock Mountains, Gaspé, Q. (*Macoun.*) Arctic Sea coast. (*Richardson.*) Summits of the Rocky Mountains. (*Drummond.*) Mount Selwyn, Peace River Pass. (*Macoun.*) Greenland. (*Hook. Arct. Pl.*)

(282.) **A. stricta**, Fenzl.

A. Rossii, R. Br. Hook. Fl. I., 100. Macoun's Cat., No. 253.

A. ubiginosa, Schleich. Gray, Proc. Phil. Acad., 1863.

Arctic Sea coast. (*Richardson.*) Upon the summits of the Rocky Mountains, Lat. 54°-57°. (*Drummond.*) Top of Mount Selwyn, Peace River Pass. (*Macoun.*) Top of the Rocky Mountains; Kootanie Pass. (*Dawson.*) Greenland. (*Hook. Arct. Pl.*)

(283.) **A. pungens**, Nutt. Torr. & Gray Fl. I., 179.

Top of the Rocky Mountains, in the S. Kootanie Pass. (*Dawson.*)

(284.) **A. Michauxii**, Hook.

A. stricta, Michx. Hook. Fl. I., 99. Macoun's Cat., No. 250.

Alsine Michauxii, Fenzl. Gray, Manual, 2d Ed., 1858.

Rocky, gravelly and sandy soil. North to the shores of the Arctic Sea. (*Richardson.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) McLeod's Harbor, Cockburn Island, Lake Huron. (*J. Bell.*) Near London, Ont. (*Saunders.*) Huron County. (*Gibson.*) Common on limestone soil at Belleville; Point Pelee, Lake Erie; Red Bay, Bruce Peninsula, Lake Huron; Pic River, north-east coast of Lake Superior; Lake of the Woods; Valley of the Qu'Appelle at Fort Ellice; Dunvegan, Peace River, Lat. 56°. (*Macoun.*) Saskatchewan Plains. (*Bourgeau.*)

(285.) **A. macrocarpa**, Pursh, 318.

North-west coast of America. (*Pursh.*) Chamisso's Island and Island of St. Lawrence. (*Chamisso.*) North-west coast of Alaska. (*Rothr. Alask.*)

(286.) **A. tenella**, Nutt. Torr. & Gray, Fl. I., 179.

Dry rocky soil near Victoria, Vancouver Island. (*Macoun.*)

This species is referred to on page 99 of Hooker's Flora as having

Drum-
Stuart
coun.)

coun.)
ntains.
ireen-

Rocky
Peace
Pass.

on.)

Arctic
Leod's
i, Ont.
soil at
Lake
of the
Peace
)

Island
Rothr.

aving

bee

Ma

(28

I

(*Bu*

(288

In

Lab

plac

of O

unb

Am

(289

Vo

swan

(290.

In

wan.

(291.

Alc

Strai

Va

Str

misso.

Alask

(292.)

Fro

misso.)

been collected on the Columbia by *Scouler*. Hooker includes it in *A. Michauxii*.

(287.) **A. Grœnlandica**, Spreng.

Alpine Grœnlandica, Gray. Matthew, Pl. Acad., 8.

Labrador. (*Torr. & Gray*.) Tadoussac, north shore of St. Lawrence. (*Burgess*.) Greenland. (*Hook. Arct. Pl.*)

(288.) **A. serpyllifolia**, Linn. Thyme-leaved Sandwort.

Introduced, though apparently indigenous. Halifax, N.S. (*Lawson*.) Labrador. (*Brunet*.) Sea shore at Rivière du Loup, Q., on sandy places. (*Thomas*.) Common around London, Ont. (*Saunders*.) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Very common in Hastings and Northumberland Cos.; rear of Picton, Prince Edward Co.; Owen Sound and Amherstburgh, Ont. (*Macoun*.) Hamilton, Ont. (*Buchan*.)

(289.) **A. lateriflora**, Linn. Broad-leaved Sandwort.

A. buxifolia, Poir. Hook. Fl. I., 101.

Stellaria biflora, Pursh, 317.

Mochringia lateriflora, Fenzl. Gray, Man., 2nd Ed. 1858.

Very abundant from Nova Scotia, particularly on sandy soil or in swampy ground, to Vancouver Island, and north to Lat. 60°.

(290.) **A. macrophylla**, Hook. Fl. I., 102.

In shady woods, North-west America, and banks of the Saskatchewan. (*Douglas*.) Victoria, Vancouver Island. (*Macoun*.)

(291.) **A. peploides**, Linn. Sea-side Sandwort.

Honkenya peploides, Ehrh. Torr. & Gray, Fl. I., 176.

Along sea shores everywhere, from the Bay of Fundy to Behring's Straits. Greenland. (*Hook. Arct. Pl.*)

Var. **oblongifolia**, Watson.

A. peploides, var. *major*, Hook. Fl. I., 102.

Honkenya oblongifolia, Torr. & Gray, Fl. I., 176.

Straits of De Fuca. (*Scouler*.) Sitka, also Behring's Straits. (*Chamisso*.) Queen Charlotte Islands. (*Dawson*.) Kotzebue Sound. (*Rothr. Alask.*)

(292.) **A. physodes**, DC. Prod. I., 413.

Stellaria ovalifolia, Hook. Fl. I., 97.

Merckia physodes, Fisch. Hook. Fl. I., 103.

Frequent on the sandy sea shores of the Bay of Eschscholtz. (*Chamisso*.) Norton Sound to Point Barrow, (*Rothr. Alask.*)

Excluded Species.

Hooker on page 101 of his Flora of North America mentions *A. fasciculata*, Pursh, as occurring in Canada. There is no doubt but that the plant intended is *A. Michauxii*, as the leaves of that species are always in fascicles in the axils of the branches.

82. STELLARIA, Linn. (CHICKWEED STAR-WORT.)

- (293.) ***S. media***, Smith. Common Chickweed.

Holosteum succulentum, Linn. Pursh, 90.

Introduced into all garden grounds from the Atlantic to the Pacific. Greenland. (*Hook. Arct. Pl.*)

- (294.) ***S. longifolia***, Muhl. Long-leaved Stitchwort.

Spergulastrum gramineum, Michx. Fl. I., 276.

Micropetalon gramineum, Pers. Pursh, 320.

Stellaria graminea, Bigel. Richards. in Frankl. Journ., 10.

Grassy places; quite common from Nova Scotia to the Pacific Coast. It is a northern species and delights in grassy margins of woodland brooks. (*Macoun.*) Woody country fro. Lat. 54°-64°. (*Richardson.*) Sitka and Kotzebue Sound. (*Rothr. Alask.*)

- (295.) ***S. borealis***, Bigel. Northern Stitchwort.

Spergulastrum lanceolatum, Michx. Fl. I., 275.

Micropetalon lanceolatum, Pers. Pursh, 320.

Very common in mud on brook margins and in open swamps from the Atlantic to the Pacific, and north to Fort Norman in Lat. 65°. Magdalen Islands, Gulf of St. Lawrence. (*McKay.*) Greenland. (*Hook. Arct. Pl.*)

Var. ***alpestris***, Gray, Manual, 93.

Stellaria alpestris, Fries.

S. brachypetala, Bong. Torr. & Gray, Fl. I., 186.

S. borealis, var. *corollina*, Fenzl. Macoun's Cat., No. 274.

S. longifolia, Pl. Bourgeau, 255 in part.

S. gracilis, Richards. Macoun & Gibson.

Pic Island, Thunder Bay, Lake Superior, growing in tufts close to the water, 1869. At Yale, B. C. (*Macoun.*) Saskatchewan Plains. (*Bourgeau.*) Sitka. (*Torr. & Gray.*)

- (296.) ***S. calycantha***, Bongard. Torr. and Gray, Fl. I., 186.

This species is referred to *S. borealis* by Sereno Watson in his Index

ns *A.*
t that
s are

T.)

acific.

Coast.
dland
(son.)

from
65°.
Hook.

se to
lains.

index

to
to
ne
acc
any
lan
sho

(29

L
N.E.
(Ba
Isle

(298

S
dam
and

(299

Th
my c
leav
Abu
57°.
Lake

(300

Dr
the m
Pacif
prair
island
glauc

Va

Fro

to American Botany. I believe its characters to be sufficiently distinct to warrant its separation from that species. Specimens were collected near Macleod's Lake in Northern British Columbia which completely accord with the description of this species and are altogether unlike any form of *S. borealis* we possess. The character, "leaves ovate-lanceolate, connate, the margin minutely ciliate with white hairs, much shorter than the internodes," separates it from that species.

(297.) ***S. uliginosa***, Murr. Swamp Stitchwort.

S. aquatica, Poll. Torr. & Gray, Fl. I., 186.

Larbreca uliginosa, Hook. Fl. I., 93.

Halifax Co., N.S. (*McKay*.) Rather common in swamps and rills, N.B. (*Forster's Cat.*) English River, near Isle La Crosse, N.W.T. (*Back*.) Prairies of the Rocky Mountains Lat. 52°-57°. (*Drummond*.) Island of Ounalashka. (*Chamisso*.) Greenland. (*Hook. Arct. Pl.*)

(298.) ***S. crassifolia***, Ehrh. Gray, Manual, 93.

S. borealis, var. β , Hook. Fl. I., 95.

St. Paul's Island. Gulf of St. Lawrence. (*McKay*.) Frequent in low damp spots in the prairie region. Specimens from the Cypress Hills and Hand Hills are like the eastern forms. (*Macoun*.) Sitka. (*Mertens*.)

(299.) ***S. gracilis***, Richards. Hook. Fl. I., 97.

This species is doubtfully referred to *S. uliginosa* by Watson, but is in my opinion quite distinct. The abundant gemmæ in the axils of the leaves and its peculiarly lax habit amply distinguish it from *S. uliginosa*. Abundant on the banks of Methy River, near Portage La Loche, Lat. 57°. (*Macoun*.) York Factory, Hudson's Bay. (*R. Bell*.) About Slave Lake, and between Cumberland House and Hudson's Bay. (*Richardson*.)

(300.) ***S. longipes***, Goldie. Long-stalked Stichwort.

S. glauca, Meyer. Pl. Lab., 93.

Dry gravelly river banks and margins of lakes, also sandy woods in the north. Very abundant in many places from Nova Scotia to the Pacific. In its various forms it is found on the mountains, on the prairie and in the forest, and extends northward to the shores and islands of the Arctic Sea. The eastern form is tall, rigid and generally glaucous. (*Macoun*.) Greenland. (*Hook. Arct. Pl.*)

Var. **minor**, Hook. Fl. I., 95.

S. palustris, Richards. in Frankl. Journ., 10.

S. stricta, Hook. Fl. I., 96.

From Lake Winnipeg to Bear Lake, Lat. 65°. (*Richardson*.) From

Hudson's Bay to the Rocky Mountains, Lat. 52° - 56° . (*Drummond*.)
Echimamish River to Oxford House. (*R. Bell*.) Nechaceo River.
Quesnel and Blackwater River, B.C. (*Macoun*.)

Var. (*laeta*,) Torr. & Gray. Fl. I., 185.

S. laeta, Richards. in Frankl. Journ., 10. Hook. Fl. I., 96.

From Great Bear Lake to the shores and islands of the Arctic Sea.
(*Richardson*.) Upon the more elevated of the Rocky Mountains, Lat.
 52° - 56° . (*Drummond*.) Top of Stuart Lake Mountain, B.C.; top of
Mount Selwyn, Peace River Pass. (*Macoun*.) Top of Rocky Moun-
tains, S. Kootanie Pass. (*Dawson*.)

Var. (*Edwardsii*,) Torr. & Gray, Fl. I., 185.

S. Edwardsii, R.Br. Hook. Fl. I., 96.

S. nitida, Hook. in Scoresb. Greenl., 411.

On the coast near Ste. Anne des Monts, Gaspé. (*O. D. Allen*.) East
coast of Hudson's Bay. (*R. Bell*.) Shores and islands of the Arctic
Sea. (*Richardson*.) Behring's Straits. (*Chamisso*.) Greenland. (*Hook*.)
Arct. Pl.

(301.) *S. nitens*, Nutt. Torr. & Gray, Fl. I., 185.

S. stricta, Hook. Fl. I., 96, in part.

Vancouver Island, around Victoria. (*Hill & Macoun*.)

(302.) *S. umbellata*, Turcz.

S. borealis, var. γ , Hook. Fl. I., 94.

On the Rocky Mountains, Lat. 52° - 56° . (*Drummond*.)

(303.) *S. crispa*, Cham. & Schlecht.

Dry slopes of Cedar Hill near Victoria, British Columbia. (*Macoun*.)
Sitka. (*Rothr. Alaska*.)

(304.) *S. obtusa*, Engelm. (New Species.)

S. humifusa, Rottb. Macoun's Cat., No. 269.

On the boggy slope of a hillside near Macleod's Lake, British Co-
lumbia, 1875. (*Macoun*.)

(305.) *S. humifusa*, Rottb.

Arenaria thymifolia, Pursh, 317.

A. Purshiana, Seringe. Hook. Fl. I., 102.

Sea shore of Labrador. (*Pursh*.) Harvey, York Co., N.B. Rare.
(*Fowler's Cat*.) Shores of the Gulf St. Lawrence, Little Fox River,
Gaspé. (*Macoun*.) Pointé des Monts, Gaspé. (*J. Bell*.) Temiscouta,
Q. (*Burgess*.) Kamouraska, Q. (*MacLagan*.) Sandy shores of the

ond.)
river.

Sea.
Lat.
p of
oun-

East
ctic
look.

un.)

Co-

are.
ver,
uta,
the

Ar
(R

8
(30

I
from
Vic
(30

T
pro
enn
(308

O
Mon
(F/
shin
Lak
Edm
toric
Lat.
Mou
(309

O
to V
(310

W
Island

Arctic Sea and islands. (*Richardson.*) Norton and Kotzebue Sound.
(*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*)

83. CERASTIUM, Linn. (MOUSE-EAR CHICKWEED.)

(306.) **C. viscosum**, Linn. Pl. Bourgeau, 255.

C. vulgatum, Linn. Hook. Fl. I., 103. Torr. & Gray, Fl. I., 187. Gray, Manual, 93.

C. glomeratum, Thuill. Sow. Eng. Bot. II., 82.

Introduced into cultivated ground, more especially gardens. Reported from Nova Scotia to the western part of Ontario. Abundant around Victoria, British Columbia. (*Macoun.*) Greenland. (*Hook. Arct. Pl.*)

(307.) **C. vulgatum**, Linn.

C. viscosum, Linn. Herb. not Spec. Hook. Fl. I., 103. Gray, Manual, 94.

C. triviale, Link.

This species seems to be indigenous to Ontario and the Eastern provinces, as it is common in woods and cultivated grounds. It is perennial, or lasts more than two years. Greenland. (*Hook. Arct. Pl.*)

(308.) **C. nutans**, Raf. Nodding Mouse-ear Chickweed.

On places where water lies in the spring. Windsor Junction, N.S. Montreal Mountain, Q. (*McGill Coll. Herb.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Very abundant at Belleville on wet limestone shingle; woods near Amherstburgh, Ont.; Prince Arthur's Landing, Lake Superior; Lake Manitoba at the Narrows; Big Lake west of Edmonton; Little Slave Lake; St. John's, Peace River; and at Victoria, Vancouver Island. (*Macoun.*) From the Eastern provinces to Lat. 58°, and from Hudson's Bay to the elevated valleys of the Rocky Mountains. (*Richardson.*)

(309.) **C. arvense**, Linn. Meadow Chickweed.

C. Pennsylvanicum, Hornem. Hook. Fl. I., 104

C. elongatum, Pursh, 321. Hook. Fl. I., 103.

C. tenuifolium, Pursh, 321.

On rocky banks, hills and pastures, from Labrador and Pictou, N.S. to Vancouver Island. A common and beautiful species.

(310.) **C. oblongifolium**, Torrey.

C. arvense, Pursh, 321. (?) Richards in Frankl. Journ., 738.

? *C. bracteatum*, Raf. Torr. & Gray Fl. I., 189.

C. pubescens, Goldie. Edinb. Phil. Journ. IV., 328.

Wet woods, close to Amherstburgh, Ont.; Point Pelee and Pelee Island, Ont. A rare and beautiful species.

(311.) **C. alpinum**, Linn. Alpine Mouse-ear Chickweed.

Forteau Bay, Labrador. (*Butler.*) Cliff and debris, Petite Portage, Cape Gaspé. (*J. Bell.*) Arctic America and adjacent islands, Kotzebue Sound. (*Lay & Collie.*) Rocky Mountains. (*Drummond.*) Churchill River, Hudson's Bay. (*R. Bell.*) Greenland. (*Hook. Arct. Pl.*)

Var. **Behringianum**, Regel.

C. Behringianum, Cham. & Schlecht. Hook. Fl. I., 105. Macoun's Cat., No. 279.

C. vulgatum, var. *Behringianum*, Fenzl. Rothr. Alask. 444.

In the Bay of Eschscholtz. (*Hooker.*) Kotzebue Sound to Cape Lisburne. (*Rothr. Alask.*) Bow River Pass, Rocky Mountains. (*Macoun.*) Rocky Mountains. (*Bourgeau.*)

Var. **Fischerianum**, Torr. & Gray Fl. I., 188.

C. rigidum, Ledeb. Hook. Fl. I., 105.

C. Fischerianum, Ser. Hook. Fl. I., 103.

C. alpinum, Hook. Fl. I., 104, in part.

C. vulgatum, vars. *grandiflorum* & *macrocarpum*, Fenzl. Rothr. Alask.

Frequent on all the coasts of America bordering on Behring's Straits, also Unalashka Island. (*Chamisso.*) Norton Sound. (*Rothr. Alask.*) Smith's Sound, Greenland. (*Hook. Arct. Pl.*)

Var. **glabratum**, Hook. Fl. I., 104.

Duke of York's Bay. (*Capt. Parry.*)

Var. **latifolium**, Smith. (?)

A form, with one or two flowered peduncles and clothed with glandular hairs, causing the upper part of the stems to appear almost viscid, was obtained on cliffs along the Gaspé coast, about 15 miles below Ste. Anne des Monts, in August, 1882. It has the general appearance of var. *Behringianum*, but seems nearer to *C. latifolium* of Smith's English Botany.

(312.) **C. pilosum**, Ledeb.

C. stellarioides, Moq. Hook. Fl. I., 103.

Nootka Sound. (*De Candolle.*) Alaska. (*Bot. Cal. I.*, 67.) A little known species.

(313.) **C. trigynum**, Vill.

Stellaria cerastioides, Linn. Torr. & Gray, Fl. I., 184.

Table-topped Mountain, Gaspé, Q. (*O. D. Allen.*) Greenland. (*Hook. Arct. Pl.*)

age,
buc
hill

Cat.,

Cape
Ma-

sk.
raits,
(ask.)

land-
scid,
Ste.
ce of
English

little

and.

(314)

W
Very
place
the v
Bell

(315)

On
Quee
(*Men*)

(316)

Th
70.
Moun

(317.)

Roc
of the

(318.)

Wet
lakes.
and P
Charlo
along t
Island,
North
the A
Greenl

84. SACINA, Linn. (PEARL-WORT.)**(314.) S. procumbens, Linn.**

West coast of Newfoundland. (*J. Bell.*) Bedford, N.S. (*Lawson.*) Very common at Pictou, N.S. (*McKay.*) Damp rocks and springy places, N.B. (*Fowler's Cat.*) Springy places and damp rocks along the whole Gaspé coast. (*Macoun.*) Pointe des Monts, Gaspé Bay. (*J. Bell.*) Greenland. (*Hook. Arct. Pl.*)

(315.) S. occidentalis, Watson. Bot. Cal. I., 70.

S. procumbens, Linn. Hook. Fl. I., 92.

On rocks near the sea at Victoria, Vancouver Island. (*Macoun.*) Queen Charlotte Islands. (*Dawson.*) North-west coast of America. (*Menzies.*) Sitka, Ounalashka and Kotzebue Sound. (*Rothr. Alask.*)

(316.) S. Linnæi, Presl.

Spergula saginoides, Linn. Hook. Fl. I., 93.

This species is ascribed to Canada, by Sereno Watson, Bot. Cal. I., 70. He says it extends from Arctic America, southward in the Rocky Mountains. Greenland. (*Hook. Arct. Pl.*)

(317.) S. decumbens, Torr. & Gray Fl. I., 177.

Spergula saginoides, Michx. Fl. I., 276, not Linn.

Sagina procumbens, Pursh, 119.

Spergula subulata, Hook. Fl. I., 93.

Sagina subulata, Torr. & Gray Fl. I., 178.

Rocky Mountains. (*Drummond.*) On the open prairie, 30 miles east of the Hand Hills, N.W.T. (*Macoun.*)

(318.) S. nodosa, E. Meyer.

Spergula nodosa, Linn. Hook. Fl. I., 93.

Wet soil and crevices of rocks along shores of both the sea and inland lakes. Magdalen Islands, Gulf of St. Lawrence. (*McKay.*) Halifax and Pictou, N. S. (*Sommers.*) Restigouche River and Pea Point, Charlotte Co., N. B. (*Fowler's Cat.*) Abundant at many points along the Gaspé coast. Island of St. Ignace, Agate Island, Michipicotin Island, and along the north-east coast of Lake Superior. (*Macoun.*) North end of Lake Winnipeg. (*R. Bell.*) Ontario, to the shores of the Arctic Sea, eastward of the Mackenzie River. (*Richardson.*) Greenland. (*Hook. Arct. Pl.*)

85. SPERCULARIA, Pers. (SAND SPURRY.)**(319.) S. media, Presl.***Arenaria rubra* var. β . Michx. Fl. I., 274.*A. Canadensis*, Pers. Pursh. 319.*Arenaria rubra*, Hook. Fl. I., 98.*Spergula rubra*, var. (?) γ . Torr. & Gray Fl. I., 175.*Spergularia rubra*, var. *marina*. Matthew, Pl. Acad. 21.*Lepigonum medium*, Fries. Wat. Index, 103.

Salt marshes and sands both along the Atlantic coast and throughout the prairie region. Pictou, N.S. (*Mc Kay*.) Salt marshes and sands, N.B. (*Fowler's Cat.*) Very common on the borders of salt lakes and ponds, from Winnipeg to the Rocky Mountains. (*Macoun*.) Between Cumberland House and Bear Lake. (*Richardson*.) James's Bay. (*Burgess*.)

(320.) S. rubra, Presl.*Arenaria rubra*, Hook. Fl. I., 98, in part.*Spergula rubra*, Torr. & Gray, Fl. I., 175.*Spergularia rubra*, var. *campestris*. Gray, Manual, 95.*Lepigonum rubrum*, Fries. Wat. Index, 103.

On comparatively dry soil. Windsor, Halifax and Pictou, N.S. (*Lawson*.) Sandy soil; abundant in Fredericton, N.B. (*Fowler's Cat.*) Cacouna, Q. (*Buchan*.)

(321.) S. salina, Presl. Gray, Manual, 95.*Lepigonum salinum*, Fries. Wat. Index, 104.

Brackish sands, along the sea coast. Labrador. (*Brunet*.) Pennant, N.S. (*Sommers*.) Sand on seashore, N.B. (*Fowler's Cat.*) Shore of Gaspé Bay. (*J. Bell*.) Frequent from the head of the Bay of Chaleur, around the Gaspé coast, up to Rivière du Loup, Q. (*Macoun*.) Greenland. (*Hook. Arct. Pl.*)

86. SPERCULA, Linn. (CORN SPURRY)**(322.) S. arvensis, Linn.**

Introduced. A weed in Nova Scotia. (*Lawson*.) A pestilent weed in damp soil. N.B. (*Fowler's Cat.*) A very abundant weed throughout the Gaspé peninsula, and the south shore of the St. Lawrence. (*Macoun*.) Fields and pastures, St. Joachim, Q. (*Brunet*.) Vicinity of Ottawa. (*Fletcher, Fl. Ott.*)

ghout
N.B.
onds,
Cum-
gess.)

N.S.
Cat.)

nant.
re of
leur,
roon-

weed
ugh-
ence.
nity

(323)

Dr
ston.
south

(324.)

This
who i
occure

(325.)

Intr
Colbor

(326.)

Intro
Owing
after it
in waste

(327.)

Abun

XVI. PARONYCHIEÆ.

87. PARONYCHIA, Tourn. (WHITLOW-WORT.)

- (323.) **P. sessiliflora**, Nutt. Hook. Fl. I., 226.

Dry banks of the north Saskatchewan; between Carlton and Edmonton. (*Drummond.*) On dry hills and river banks throughout the southern prairie. (*Macoun.*)

88. ANYCHIA, Michx. (FORKED CHICKWEED.)

- (324.) **A. dichotoma**, Michx. Fl. I., 113.

A. Canadensis, Elliott. Hook. Fl. I., 226.

This plant is introduced into the catalogue on the authority of Hooker, who is followed by Torrey & Gray. We have no direct proof of its occurrence within our limits.

89. SCLERANTHUS, Linn. (KNAWEI.)

- (325.) **S. annuus**, Linn. Pursh, 315.

Introduced at a few points. Three Rivers, Q. (*MacLagan.*) Port Colborne, Lake Erie. (*McGill Coll. Herb.*)

XVII. PORTULACACEÆ. PURSLANE FAMILY.

90. PORTULACA, Tourn. (PURSLANE.)

- (326.) **P. oleracea**, Linn. Common Purslane.

Introduced and become a pestilent weed in all market gardens. Owing to its tenacity of life and the power of ripening its seeds long after it has been rooted up, it is very difficult to get rid of. It is found in waste places and in gardens wherever cultivation has been attempted.

91. LEWISIA, Pursh.

- (327.) **L. rediviva**, Pursh.

Abundant on the dry, arid soil around Ashcroft, Thompson River, B.C.

(*Hill & Macoun.*) Nicola Valley, and elsewhere in the dry southern interior of B.C. (*Dawson.*)

92. CLAYTONIA, Linn. (SPRING BEAUTY.)

(328.) **C. linearis**, Dougl. Hook. Fl. I., 224.

Abundant on Vancouver Island and as far north on the mainland as Black Water River and even to the Nechaceo. (*Macoun.*)

(329.) **C. parvifolia**, Moq.

C. filicaulis, Dougl. Hook. Fl. I., 224.

Rocks; Nootka and Queen Charlotte Islands, on the north-west coast of America. (*Menzies.*) Around Victoria, Vancouver Island. (*Macoun.*) Queen Charlotte Islands. (*Dawson.*)

(330.) **C. Virginica**, Linn. Spring Beauty.

Rich woods. Pietou and Truro, N. S. (*Lawson.*) Vicinity of Bathurst, N.B. (*McGill Coll. Herb.*) Near Montreal. (*Cleghorn.*) Very abundant in Ontario. (*Macoun.*) Saskatchewan. (*Drummond.*) Kotzebue Sound. (*Rothr. Alaska.*)

(331.) **C. Caroliniana**, Michx. Broad-leaved Spring Beauty.

C. Virginica, var. *spathulifolia*, DC. Hook. Fl. I., 224.

C. spathulifolia, Salisb. Pursh. 175.

More northern than the preceding. Abundant in Nova Scotia. (*Sommers.*) Found at Oxbow, Salmon River; Blackville, Miramichi, N.B., but not common. (*Fowler's Cat.*) Vicinity of Bathurst, N.B. (*McGill Coll. Herb.*) Woods near Cape Despair, Gaspé. (*Ells.*) Common throughout Québec. (*Brunet.*) Abundant in eastern Ontario. (*Macoun.*) Saskatchewan. (*Drummond.*)

Var. **sessilifolia**, Torrey.

C. lanceolata, Pursh. Hook. Fl. I., 224.

Valleys of the Rocky Mountains, in rich soil. (*Drummond.*) Rocky Mountains in the S. Kootanie Pass. (*Dawson.*) On the mountains of British Columbia. (*Cowley.*)

(332.) **C. Sibirica**, Linn.

C. alsinoides, Sims. Hook. Fl. I., 225.

C. Unalaschkensis, Fisch. Hook. Fl. I., 225.

? *C. asarifolia*, Bong. Torr. & Gray, Fl. I., 200.

Very abundant along the whole west coast of British Columbia, from the southern boundary to Cape St. Elias and Sitka.

southern

land as

th-west
Island.

inity of
(*eghorn*.)
(*iamond*.)

y.

Scotia.
ramichi,
st, N.B.
Com-
Ontario.

Rocky
tains of

a, from

(3

CH

C
(M

V

C
(M

(33

O

(335

O
pool

(336

W

(337.

Ca

(338.

On
(339.)

May
British

- (333.) **C. perfoliata**, Donn. Hook. Fl. I., 225.

Vancouver Island and in the interior of British Columbia, above Clinton. (*Macoun.*) Cascade Mountains. (*Dawson.*)

Var. **parviflora**, Torrey.

C. parviflora, Dougl. Hook. Fl. I., 225.

C. gypsophiloidea, Fisch. & Mey. Torr. & Gray, Fl. I., 200.

Common around Victoria, Vancouver Island, and up the Fraser, B.C. (*Macoun.*)

Var. (**spathulata**,) Torrey.

C. spathulata, Dougl. Hook. Fl. I., 226.

On Cedar Hill and other localities around Victoria, Vancouver Island. (*Macoun & Hill.*)

- (334.) **C. exigua**, Torr. & Gray, Fl. I., 200.

C. tenuifolia, Torr. & Gray, Fl. I., 201.

On Cedar Hill and around Victoria, Vancouver Island. (*Macoun.*)

- (335.) **C. Chamissonis**, Esch.

C. aquatica, Nutt. Torr. & Gray, Fl. I., 201.

C. flagellaris, Bong. Rothr. Alask., 446.

Onnalashka Island and Sitka. (*Rothr. Alask.*) Nachacco River, in pools of water, growing on mud. Northern British Columbia. (*Macoun.*)

- (336.) **C. dichotoma**, Nutt. Torr. & Gray, Fl. I., 202.

Wet, rocky places, near Victoria, Vancouver Island. (*Macoun.*)

- (337.) **C. sarmentosa**, C. A. Meyer.

Cape Lisburne and Kotzebue Sound. (*Rothr. Alask.*)

93. CALANDRINIA, H B K.

- (338.) **C. Menziesii**, Hook.

Talinum Menziesii, Hook. Fl. I., 223.

C. speciosa, Lindl. Torr. & Gray, Fl. I., 197.

On rocks near Victoria, Vancouver Island. (*Macoun.*)

- (339.) **C. pygmaea**, Gray.

Talinum pygmaeum, Gray. Macoun's Cat., No. 305 & 308.

May be looked for on the mountains along the southern boundary of British Columbia.

94. MONTIA, Linn.(340.) **M. fontana**, Linn.

Labrador. (*Gmelin.*) Newfoundland. (*Pylaie.*) Near Ste. Anne des Monts, Gaspé, on the coast. (*O. D. Allen.*) Vancouver Island, near Victoria, in pools. (*Macoun.*) Sitka, Ounalashka, Norton Sound and Kotzebue Sound. (*Rothr. Atask.*) Greenland. (*Hook. Arct. Pl.*)

95. SPRACUEA, Torr.(341.) **S. umbellata**, Torr.

To be looked for along the southern boundary of British Columbia.

XVIII. ELATINEÆ. WATER-WORT FAMILY.

96. ELATINE, Linn. (WATER-WORT.)(342.) **E. Americana**, Arn.

Peplis Americana, Pursh, 238.

On earth, on the margin of a dry pool, at the northern end of Reed Lake, Lat. 50° 35'; Long. 107° 20', N.W.T. (*Macoun.*)

XIX. HYPERICACEÆ. ST. JOHN'S WORT FAMILY.

97. HYPERICUM, Linn. (ST. JOHN'S WORT.)(343.) **H. pyramidatum**, Ait. Great St. John's Wort.

H. ascyroides, Willd. Hook. Fl. I., 109.

H. macrocarpum, Michx. Fl. II., 82.

Low grounds, on rich soil. About Montreal and Quebec. (*Michaux.*) Lachine, near Montreal. (*Brunet.*) Swamp, St. Denis St., Montreal. (*Holmes.*) Roadside, north of Madoc, Hastings Co.; Rice Lake Plains, Ont. (*Macoun.*) Vicinity of London, Ont.; common. (*Saunders.*) Bayfield River, Huron Co., Ont. (*Gibson.*) Fullarton, Ont. (*Buchan.*) Plains of the Saskatchewan. (*Bourgeau.*)

(344.) **H. Kalmianum**, Linn. Shrubby St. John's Wort.

From Niagara Falls to the Sault Ste. Marie, along Lakes Erie and Huron; abundant. Muskoka, Ont. (*Burgess.*)

Anne
Island,
Sound
. *Pl.*

mbia.

Reed

hauv.)
ntreal.
Plains,
nders.)
ichan.)

ie and

(3

qu

(3-

fro

(34

I
Nea
Nic
pen

(34

L
Nov

(349

W
spec
samo

(350

Dr
(*Dan*
Briti

(351.

In
(*Mac*
Colum

(352.

In
Canac
sandy

(345.) **H. ellipticum**, Hook. Fl. I., 110.

This fine species extends from Nova Scotia to Lake Winnipeg, and is quite common in Quebec and the northern part of Ontario.

(346.) **H. perforatum**, Linn. Common St. John's Wort.

Introduced into pastures and by roadsides from Europe. It extends from Nova Scotia to western Ontario.

(347.) **H. corymbosum**, Muhl. Corymbed Hypericum.

H. maculatum, Michx. Fl. II., 80.

H. microanthum, Choix. Hook. Fl. I., 109.

Low, damp meadows; rather common. Halifax, N.S. (*Lawson*.) Near Quebec, and Island of Orleans. (*Brunet*.) Island of Montreal, Nicolet, and Belœil, Q. (*Maclean*.) Very abundant along the Bruce peninsula of Lake Huron, and general throughout Ontario. (*Macoun*.)

(348.) **H. mutilum**, Linn.

H. quinquerivium, Walt. Michx. Fl. II., 79. Hook. Fl. I., 110.

H. parviflorum, Willd. Pursh. 377.

Low grounds along river banks, and in moist fields. Abundant from Nova Scotia to Lake Winnipeg.

(349.) **H. Canadense**, Linn. Hook. Fl. I., 110.

Wet ground, in sandy soil. Newfoundland. (*Morrison*.) This species has nearly the same range as the last; but is not found in the same situations, as this one seems to prefer, in Ontario, wet, sandy soil.

(350.) **H. Scouleri**, Hook. Fl. I., 111.

Dry, gravelly soils. Rocky Mountains, in the S. Kootanie Pass. (*Dawson*.) North-west coast of America. (*Scouler*.) Interior of British Columbia. (*Cowley*.)

(351.) **H. anagalloides**, Cham. & Schlecht.

In a low, springy place on the top of the Cypress Hills, N.W.T. (*Macoun*.) To be looked for along the southern boundary of British Columbia.

(352.) **H. Sarothra**, Michx. Fl. II., 79.

In Torr. & Gray, Fl. I., 165, this species is recorded as a native of Canada. We have no proof of its occurrence, but it may be found on sandy soil along Lake Erie.

98. ELODES, Adns. (MARSH ST. JOHN'S WORT.)**(353.) E. Virginica, Nutt.***Hypericum Virginicum*, Linn. Hook. Fl. L., 109.*Elodes campandata*, Pursh. 379.

Marshes and borders of woodland brooks and stagnant pools. Common from Nova Scotia to Lake Winnipeg, and northward towards Hudson's Bay.

XX. MALVACEÆ. MALLOW FAMILY.

99. MALVA, Linn. (MALLOW.)**(354.) M. rotundifolia, Linn. Common Mallow.**

Introduced. Common along roadsides, in waste places around dwellings, and in gardens, from Nova Scotia to western Ontario.

(355.) M. sylvestris, Linn. High Mallow.

Introduced. Spontaneous in gardens and waste places around dwellings. Escaped from gardens in a few places, N.B. (*Fowler's Cat.*) Prescott, rare. (*Billings.*) Vicinity of Ottawa. (*Fletcher, Fl. Ott.*) Waste places at Belleville, Ont.; Fort Francis, Rainy River, Dawson Route. (*Macoun.*) Near Kemptville, Ont. (*McGill Coll. Herb.*)

(356.) M. crispa, Linn. Crisped Mallow.

Spontaneous in some old gardens. Pietou, N.S., rare. (*McKay.*) Sometimes found near dwellings, N.B. (*Fowler's Cat.*) Ottawa, in gardens. (*Fletcher, Fl. Ott.*) Gardens and waste places at Belleville: and Seymour, Northumberland Co., Ont. (*Macoun.*)

(357.) M. moschata, Linn. Musk Mallow.

Roadsides and pastures; common. Pietou, N.S. (*McKay.*) Spontaneous in gardens, N.B. (*Fowler's Cat.*) St. Jerome and Montreal. (*McGill Coll. Herb.*) Escaped from gardens at Belleville, Colborne, Rice Lake Plains, London and Owen Sound, Ont. (*Macoun.*) Waste places around Ottawa. (*Fletcher, Fl. Ott.*) Island in Detroit River. (*MacLagan.*) Vicinity of Hamilton, Ont. (*Buchan.*) Roadsides, Barrie, Ont. (*Spotten.*) Very common around London. (*Burgess.*)

(358.) M. borealis, Wallm. Northern Mallow.*M. obtusa*, Torr. & Gray, Fl. L., 225.

Introduced at Sackville, N. S. (*Lawson.*)

T.)

Com-
wards

round

dwell-
Cat.)
Ott.)
awson

Kay.)
wa, in
eville:

Spon-
Mont-
e, Col-
coun.)
Detroit
Road-
rgess.)

(355)

T

(360)

V
regio

(361)

Vi
(*Jome*)

(362)

Int
around
Aronn
Coll. L

(363.)

On
water.
road
(*Macon*)

(364.)

E-sca

100. MALVASTRUM, Gray. (FALSE MALLOW.)

- (359.)
- M. Munroanum**
- , Gray.

Malva Munroana, Dougl. Hook. Fl. I., 106.

To be looked for along the southern boundary of British Columbia.

- (360.)
- M. coccineum**
- , Gray. Prairie Mallow.

Cristaria coccinea, Pursh, 454.*Sida coccinea*, DC. Hook. Fl. I., 108.

Very common on dry clay or gravelly soil in most of the prairie region from Brandon westward.

101. SIDALCEA, Gray.

- (361.)
- S. malvæflora**
- , Gray.

Sida malvæflora, DC. Hook. Fl. I., 108.*Sida Oregona*, Nutt. Torr. & Gray, Fl. I., 234.Vicinity of Victoria, Vancouver Island, rare. (*Hill*.) Mainland, B.C. (*Jones*.)**102. ABUTILON, Tourn. (INDIAN MALLOW.)**

- (362.)
- A. Avicennæ**
- , Gærtn. Velvet-leaf.

Sida Abutilon, Linn. Pursh, 453.Introduced. Waste places, old gardens and potato fields; common around Belleville. (*Macoun*.) Vicinity of Dundas, Ont. (*Logie*.) Around Ottawa. (*Fletcher, Fl. Ott.*) Carleton Place, Ont. (*McGill Coll. Herb.*) Vicinity of London, Ont. (*Burgess*.)**103. HIBISCUS, Linn. (ROSE MALLOW.)**

- (363.)
- H. Moscheutos**
- , Linn. Swamp Rose Mallow.

H. palustris, Linn. Hook. Fl. I., 107.On land, subject to floods. Said, by Gray, to grow near brackish water. Island in the Detroit River. (*MacLagan*.) Marsh where the road enters on Pelee Point, in coming from Leamington, Ont. (*Macoun*.) Roadside near Windsor, Ont. (*Dr. Kemp*.)

- (364.)
- H. Trionum**
- , Linn. Bladder Ketmia.

Escaped from gardens, rare, Pictou, N.S. (*McKay*.) Spontaneous

in a few gardens and waste places at Belleville. (*Macoun.*) Vicinity of Ottawa. (*Fletcher, Fl. Ott.*) Malden, Ont. (*MacLagan.*) Vicinity of Woodstock, Ont. (*Millman.*)

104. SPHÆRALCEA, St. Hilaire.

(365.) **S. rivularis**, Torr.

Malva rivularis, Dougl. Hook. Fl. I., 107.

S. acerifolia, Nutt. Torr. & Gray, Fl. I., 228. Macoun's Cat., No. 313.

Common on banks from the Pacific to the Rocky Mountains. (*Douglas.*) Waterton Lake, Lat. 49°, Rocky Mountains. (*Dawson.*)

Excluded Species.

Sida hederacea, Torr.

Malva hederacea, Dougl. Hook. Fl. I., 107.

This species, although in Hooker's Flora, is south of our limits.

XXI. TILIACEÆ. LINDEN FAMILY.

105. TILIA, Linn. (LINDEN. BASSWOOD.)

(366.) **T. Americana**, Linn. Basswood.

T. glabra, Vent. Hook. Fl. I., 108.

T. Canadensis, Michx. Fl. II., 306.

Shore of Grand Lake, at Woodstock and along the St. John River, N.B. (*Fowler's Cat.*) Quebec. (*Brunet.*) On Montreal Mountain, 1821. (*Holmes.*) River Rouge, Q. (*D'Urban.*) Abundant throughout Ontario, and, as a low tree, as far west as the Lake of the Woods. (*Macoun.*) Norway House, at the north end of Lake Winnipeg. (*Richardson.*) In the lower valley of the Assiniboine. (*Macoun.*)

Var. **pubescens**, Loud.

T. pubescens, Ait. Hook. Fl. I., 108.

T. laxiflora, Michx. Fl. II., 306.

About Quebec. (*Mrs. Shepherd.*) Shores of Lake St. Clair, and near Sandwich, Ont. (*Douglas.*)

(367.) **T. Europæa**, Linn. European Linden.

Planted in Pictou and Halifax, N.S. (*McKay.*) Extensively planted about Fredericton, N. B. (*Fowler's Cat.*) Planted in the streets of many towns in Ontario. Well suited to our climate.

vicinity
vicinity

No. 313.
contains.
(son.)

River,
mountain,
through-
of the
Manipeg.
(n.)

and near

planted
effects of

(3

na

no

(3

of

su

(3

Ne

Qu

(M

(3

Ab

wa

(D

(37

V

Oec

mo

(37

I

rail

XXII. LINACEÆ. FLAX FAMILY.

106. LINUM, Linn. (FLAX.)

(368.) **L. Virginianum**, Linn.

Dry woods or sandy thickets. Vicinity of Hamilton. (*Logie*.) Canada Southern Railway, one mile east of the Great Western crossing near Niagara Falls. (*Macoun*.) Lake Huron. (*Todd*.)

(369.) **L. striatum**, Walter.

L. rigidum, Torr. & Gray, Fl. I., 204, in part.

Wet or boggy grounds along the Great Lakes. Toronto Island; shores of Lake Huron, Red Bay, Fishing Islands and Oliphant, Bruce Peninsula, Ont. (*Macoun*.)

(370.) **L. sulcatum**, Riddel.

L. rigidum, Torr. & Gray, Fl. I., 204, in part.

L. Boottii, Planch. Gray, Manual, 1856.

Dry sandy soil, apparently rare. Rice Lake Plains, near Castleton, Northumberland Co.; Oak Hills, Hastings Co., Ont. On sand in the Qu'Appelle Valley, a little west of the bridge at Fort Ellice, N.W.T. (*Macoun*.)

(371.) **L. rigidum**, Pursh, 210.

On dry clay soil, rather common on the southern prairie. (*Macoun*.) Abundant on the plains of the interior, especially about the Saskatchewan. (*Richardson*.) Milk River and Woody Mountain, N. W. T. (*Dawson*.)

(372.) **L. perenne**, Linn. Prairie Flax.

L. Lewisii, Pursh, 210.

Very common throughout the prairie region and west to the Pacific Ocean, and north to the shores of the Arctic Sea. Reported from Mar-mora Lake, Ont., but this is doubtful.

(373.) **L. usitatissimum**, Linn. Cultivated Flax.

Introduced into many fields and becoming common along all our railways, from Nova Scotia westward.

XXIII. GERANIACEÆ. GERANIUM FAMILY.

107. GERANIUM, Linn. (CRANESBILL.)

(374.) **G. maculatum**, Linn. Wild Cranesbill.

Open woods and fence borders. Harbor Grace, Nfld. (*McGill Coll. Herb.*) Halifax Co., N.S. (*McKay.*) On Montreal Mountain, and at Knowlton, Eastern Townships, Q. Mouth of Rainy River, Dawson Route. (*McGill Coll. Herb.*) Common throughout Ontario and westward to Rainy River.

(375.) **G. Richardsoni**, Fisch. & Mey.

G. albiflorum, Hook. Fl. I., 116.

G. Hookerianum, Walp. Pl. Bourgeau, 255. Macoun's Cat., No. 326.

Valleys of the Rocky Mountains. (*Drummond.*) Foot hills of the Rocky Mountains near the 49th parallel; summit of Pine River Pass, Lat. 55°. (*Dawson.*) On the borders of coulees and in thickets in the southern prairie region, and especially in ravines on the Cypress Hills, N.W.T. (*Macoun.*)

(376.) **G. Fremonti**, Torrey.

Woody Mountain in sheltered valleys, abundant. Also growing abundantly in the foothills of the Rocky Mountains. (*Dawson.*) Very abundant at Fort Walsh and the "Head of the Mountain" and western slope of the Cypress Hills, also in the foothills of the Rocky Mountains on Bow River. (*Macoun.*)

(377.) **G. incisum**, Nutt.

G. albiflorum var. (?) *incisum*, Torr. & Gray, Fl. I., 206.

Nicola Valley, B.C. (*Dawson.*) Near Spence's Bridge, B.C. (*Hill.*)

(378.) **G. erianthum**, DC.

G. maculatum, var. β , Hook. Fl. I., 116.

North-west America. (*Douglas.*) Sitka and Unalashka. (*Rothr. Alask.*)

(379.) **G. pratense**, Linn. Meadow Cranesbill.

Escaped from cultivation near St. John, N.B. (*Fowler's Cat.*)

(380.) **G. Carolinianum**, Linn. Carolina Cranesbill.

Very abundant in lately burnt woods and in thickets along river

Coll.
d at
vson
vest-

6.
the
pass,
the
fills,

ying
ery
tern
ains

Ell.)

otkr.

iver

ba
fa

(3

Ne

Cli

we

(M

(38

I

Vic

(B

(38

I

Isle

(38

V

Nat

ton.

(385

N

in a

(386

In

real.

Abun

Ont.

Island

banks and sandy or barren soil from Nova Scotia to the Pacific, and far to the north.

(381.) **C. Robertianum**, Linn. Herb Robert.

Moist woods and shaded rocky ravines. Pietou and other parts of Nova Scotia, rather common. (*McKay*.) Lower Norton, and Quaco Cliffs, N.B. (*Forster's Cat.*) Coast of Gaspé above Point Fame and westward throughout Quebec and Ontario to the Lake of the Woods. (*Macoun*.)

(382.) **C. pusillum**, Linn. Small-flowered Cranesbill.

Introduced from Europe in the neighborhood of cities and towns. Vicinity of London, Ont. (*Burgess*.) Vicinity of Hamilton, Ont. (*Buchan*.) In the streets of Victoria, Vancouver Island. (*Macoun*.)

(383.) **C. molle**, Linn. Soft Cranesbill.

Introduced from Europe. Very common around Victoria, Vancouver Island. (*Macoun*.)

108. **ERODIUM**, L'Her. (STORKESBILL.)

(384.) **E. cicutarium**, L'Her.

Very abundant around Victoria, Vancouver Island. (*Macoun & Hill*.) Naturalized at Ottawa. (*Fletcher Fl. Ott.*) In the vicinity of Hamilton, Ont. (*Buchan*.) Neighborhood of London, Ont. (*Burgess*.)

(385.) **E. moschatum**, Willd. Musky Storksbill.

Naturalized in some gardens at Ottawa. (*Fletcher*.) Growing wild in a garden at Lake La Mab, Hastings Co., Ont. (*Macoun*.)

109. **FLÆRKEA**, Willd. (FALSE MERMAID.)

(386.) **F. proserpinacoides**, Willd.

F. uliginosa, Muhl. Macoun's Cat., No. 332.

Nectris pinnata, Pursh, 239.

In low, rich woods and on river margins. Nun's Island, near Montreal. (*Holmes*.) Low, rich woods, vicinity of London, Ont. (*Burgess*.) Abundant on an island in the Detroit River opposite Amherstburgh, Ont. On the margin of pools in the vicinity of Victoria, Vancouver Island. (*Macoun*.)

110. IMPATIENS, Linn. (WILD BALSAM.)

- (387.) **I. fulva**, Nutt. Spotted Touch-me-not.

I. biflora, Walt. Pursh, 171.

I. nolitangere, $\beta.$, Michx. Fl. II., 149.

Throughout Canada; and as far north as Bear Lake, Lat. 66°. (*Richardson*.) Abundant around springs and in small rills from the Magdalen Islands and Nova Scotia to the Peace River.

- (388.) **I. pallida**, Nutt. Pale Touch-me-not.

I. nolitangere, Michx. Fl. II., 149.

Cedar swamps, along rills, and by springs. Montreal Mountain. (*Holmes*.) Gaspé coast at Mont St. Louis; abundant at Niagara Falls, below the Clifton House; Royston Park, Owen Sound. (*Macoun*.) Burlington Bay, Lake Ontario. (*Logie*.) St. Catharines, Ont. (*Mac-lagan*.) Western Ontario on Lake Huron. (*Gibson*.) Vicinity of London, Ont. (*Burgess*.) Plains of the Saskatchewan. (*Bourgeau*.) St. John's, Peace River. (*Macoun*.)

111. OXALIS, Linn. (WOOD-SORREL.)

- (389.) **O. Acetosella**, Linn. Common Wood-Sorrel.

Deep, cold woods, from Nova Scotia through New Brunswick, Quebec and northern Ontario to the Lake of the Woods. (*Macoun*.) As far north as the Saskatchewan. (*Richardson*.)

- (390.) **O. Oregana**, Nutt.

O. Acetosella, Hook. Fl. I., 118, in part.

North-west coast of America. (*Douglas*.) Woods on the Lower Fraser, B.C. (*Cowley*.)

- (391.) **O. corniculata**, Linn.

O. pilosa & *pumila*, Nutt. in Torr. & Gray, Fl. I., 212.

Freshwater, near Halifax, N.S. (*McGill Coll. Herb.*) On dry soil at various points in the southern prairie region; not common. (*Macoun*.) On the Saskatchewan plains. (*Bourgeau*.)

Var. **stricta**, Sav.

O. stricta, Linn. Hook. Fl. I., 118. Macoun's Cat., No. 335.

O. Dillenii, Jacq. Pursh, 323.

O. Lyonii, Pursh, 322.

Common along river margins, amongst gravel, from Nova Scotia to

. 66°.
m the

ntain.
Falls,
coun.)
(*Mac-*
ity of
geau.)

swick.
coun.)

Lower

y soil
amon.

stia to

th
fre
ful

(38

L
to

(39

C
Pel

(39

T
and
up s
tree

(395

Lo
Not
Basin

the Lake of the Woods. Also, at Emerson, Manitoba. Distinguished from the type by the absence of stipules. This species should be carefully examined when found, and distinguishing characters noted.

XXIV. RUTACEÆ. RUE FAMILY.

112. **XANTHOXYLUM, Colden.** (PRICKLY ASH.)

- (392.) **X. Americanum, Mill.** Northern Prickly Ash.

X. fraxineum, Willd. Hook. Fl. I., 118.

X. ramiflorum, Michx. Fl. II., 235.

X. tricarpum, Hook. Fl. 118, not Michx.

Low grounds, usually along streams, common from Montreal (*Brunet*) to the western part of Ontario, along the Georgian Bay.

113. **PTELEA, Linn.** (HOP TREE.)

- (393.) **P. trifoliata, Linn.** Shrubby Trefoil.

Confined to the shores of Lake Erie. Pelee Island and west side of Pelee Point. (*Macoun*.)

114. **ALIANTHUS, Desf.** (TREE OF HEAVEN.)

- (394.) **A. glandulosus, Desf.**

This tree has been planted in Prince Edward Co., Ont., at Belleville, and at Niagara Falls. In all these localities it grows freely, and throws up suckers from its roots. It seems as much at home as the Locust tree.

XXV. ILICINÆ. HOLLY FAMILY.

115. **ILEX, Linn.** (HOLLY.)

- (395.) **I. verticillata, Gray.**

Prinos verticillatus, Linn. Hook. Fl. I., 121.

P. Gronovii, Michx. Fl. II., 236.

Low grounds and swamps. Common in Nova Scotia. (*McKay*.) Not rare in swamps. (*Fowler's Cat.*) Borders of marshes, Gaspé Basin. (*Macoun*.) On gneiss rocks and swamps in open places, River

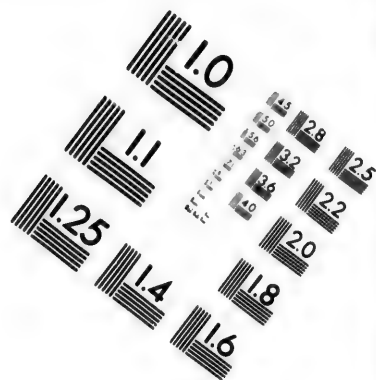
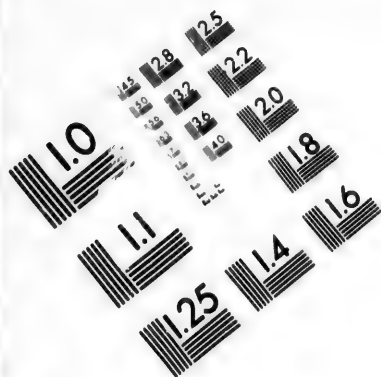
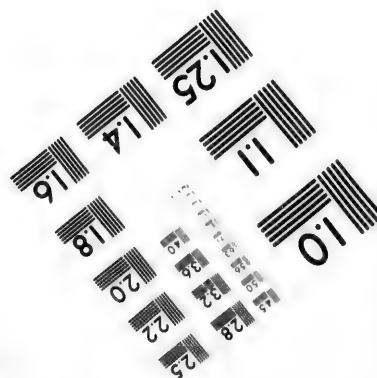
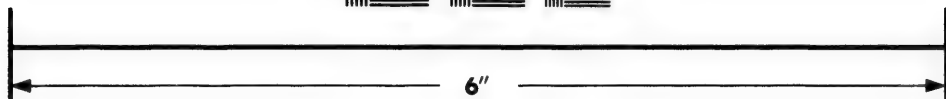
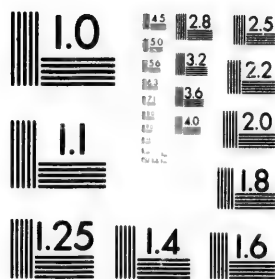


IMAGE EVALUATION TEST TARGET (MT-3)



Photographic
Sciences
Corporation

23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503



Rouge, Q. (*D'Urban.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Moist thickets and swamps near Prescott Junction, Ont. (*Billings.*) Borders of ponds and marshes throughout central Ontario. (*Macoun.*) Wolfe Island, Chippewa, and Malden, Ont. (*MacLagan.*) Vicinity of London, Ont. (*Burgess.*)

116. NEMOPANTHES, Raf. (MOUNTAIN HOLLY.)

(396.) *N. Canadensis*, DC.

Ilex Canadensis, Michx. Fl. II., 229.

Cold, wet woods and swamps. Halifax Co. and Pictou, N.S. (*McKay.*) In cold, wet woods N.B.; common. (*Fowler's Cat.*) Abundant in woods, Gaspé peninsula. (*Macoun.*) Rivière du Loup, Q. (*Thomas.*) Common on gneiss rocks and in swamps, River Rouge, Q. (*D'Urban.*) Swamps around Ottawa; common. (*Fletcher Fl. Ott.*) Moist ground near Prescott Junction, Ont.; rare. (*Billings.*) Peat bog, 5 miles north of Colborne; swamps near Partridge Lake, Addington Co.; tamarac swamp, North Hastings, Ont. (*Macoun.*) Vicinity of London, Ont.; very common in Muskoka. (*Burgess.*)

Excluded Species.

Ilex opaca, Ait., and *I. glabra*, Gray, are reported from Halifax, N.S., by Dr. Sommers, in a catalogue of Nova Scotian plants, published in the Proceedings of the Nova Scotia Institute of Natural Sciences, 1875-76. Hooker, on the authority of Pursh, credits those species to Canada. I exclude them on the ground of insufficient evidence, and because their range in the United States is south of our limits.

XXVI. CELASTRACEÆ. STAFF-TREE FAMILY.

117. CELASTRUS, Linn. (STAFF-TREE.)

(397.) *C. scandens*, Linn. Wax-work. Bitter-Sweet.

C. bullatus, Linn. Pursh, 168.

On the borders of rivers in Quebec. (*Brunet.*) On Montreal mountain. (*McGill Coll. Herb.*) Common in Ontario; climbing high over bushes and young trees, in thickets, and along rivers, from Ottawa (*Fletcher*) to Mamaisne, east coast of Lake Superior. (*R. Bell.*) Valley of the Assiniboine, east of Brandon, Man. (*Macoun.*)

Moist
borders
Wolfe
ondon,

(f.)

Key.)
unt in
omas.)
Urban.)
ground
miles
a Co. ;
f Lon-

, N.S.,
ned in
, 1875-
anada.
ecause

moun-
h over
Ottawa
Valley

401. Rockcliffe very rare at Ottawa

118. EUONYMUS, Tourn. (SPINDLE-TREE.)

- (398.) **E. Americanus**, L. var. **obovatus**, Torr. & Gray.

Low, wet places in the western peninsula of Ontario. Near Amherstburgh, and on the line of the Canada Southern Railway, at Bismark, Ont. (*Macoun*) Hills around Niagara Falls. (*MacLagan*.) Banks of Lake St. Clair. (*Douglas*.) Mountain side, near Mr. Whyte's house, Hamilton. (*Logie*.) Vicinity of London. (*Burgess*.) The typical form may be found at Niagara.

- (399.) **E. atropurpureus**, Jacq. Burning Bush.

Shady woods or open thickets. On White Island, opposite Amherstburgh, in the Detroit River. (*Macoun*.) Malden, Ont. (*MacLagan*.)

119. PACHYSTIMA, Raf.

- (400.) **P. Myrsinites**, Raf.

Ilex (?) *Myrsinites*, Pursh, 119.

Myginda myrtifolia, Nutt. Hook. Fl. I., 120.

Oreophila myrtifolia, Nutt. Torr. & Gray, Fl. I., 259.

North-west coast of America. (*Menzies*.) Valleys of the Rocky Mountains, particularly abundant near the sources of the Columbia, in Lat. 52° and Long. 118° W. (*Douglas*.) Woods of Portage River, west side of Rocky Mountains. (*Drummond*.) Very abundant on Vancouver Island around Victoria; at Yale on Cascade Mountains, and in the woods northwards to Fort Macleod, B.C., in Lat. 55°. (*Macoun*.) Also generally in localities with cool moist climate at great elevations even in the southern interior of British Columbia. (*Dawson*.)

XXVII. RHAMNACEÆ. BUCKTHORN FAMILY.

120. CEANOTHUS, Linn. (NEW JERSEY TEA.)

- (401.) **C. Americanus**, Linn. Hook. Fl. I., 124.

C. perennis, Pursh, 167.

C. intermedius, Pursh, 167.

C. sanguineus, Nutt. Torr. & Gray, Fl. I., 265.

On dry gravelly hills and along the dry banks of rivers. Abundant throughout Ontario, but apparently unknown eastward.

(402.) **C. ovatus**, Desf.*C. ovalis*, Bigel. Macoun's Cat., No. 359.*C. intermedius*, Hook. Fl. I., 124, not Pursh.

Dry gravelly banks, very rare. Along the Grand Trunk Railway a little east of Shannonville Station, Hastings Co., St. Norah's Lake, Ridout Township, Victoria Co., Ont. Very abundant on a high terrace 20 miles up the Kaministiquia above Fort William, Lake Superior; Sturgeon Lake, Dawson Route. (*Macoun.*) Gore Bay, Grand Manitoulin Island, Lake Huron. (*J. Bell.*) Upper Canada. (*Goldie.*) Lake Huron. (*Todd.*)

(403.) **C. velutinus**, Dougl. Hook. Fl. I., 125.

Sub-alpine hills near the sources of the Columbia. (*Douglas.*) Along the Fraser above Boston Bar; and on the upper slopes of Stuart Lake Mountain, B.C. (*Macoun.*)

Var. **laevigatus**, Torr. & Gray, Fl. I., 265.

C. laevigatus, Hook. Fl. I., 125.

On the Waggon Road, west of Jackass Mountain, B.C. (*Macoun.*) Rocky Mountains, in the S. Kootanie Pass. (*Dawson.*) Nootka. (*Menzies.*)

(404.) **C. sanguineus**, Pursh, 167.*C. oreganus*, Nutt. Torr. & Gray, Fl. I., 265. Macoun's Cat., No. 358.

Frequent in many parts of British Columbia, from the coast to Stuart Lake. (*Macoun.*)

121. RHAMNUS, Tourn. (BUCKTHORN,)(405.) **R. alnifolia**, L'Her.*R. franguloides*, Michx. Fl. I., 153.*R. alpinus*, Richards. in Frankl. Journ., 6, not Linn.

In cold swamps and wet meadows. In swamps, mouth of Eel River, Restigouche; near Green Head, St. John, N.B. Rare. (*Fowler's Cat.*) St. Francis River, N.B. (*Hay.*) Petitecodiac, N.B. (*J. Brittain.*) Common in Quebec and Ontario, and westward in the wooded country to the Rocky Mountains. Oxford House, Knee Lake and Hill River, north of Lake Winnipeg. (*R. Bell.*)

(406.) **R. Purshiana**, DC. Hook. Fl. I., 123.*R. alnifolius*, Pursh, 166, not L'Her.

Nootka. (*Menzies.*) To be looked for on Vancouver Island and along the southern boundary of British Columbia.

way a
Lake,
erface
erior;
Mani-
oldie.)

Along
Lake

coun.)
ootka.

. 358.
Stuart

River,
e Cat.)
ttain.)
ountry
River,

d and

Handwritten notes:
Lake Superior
Columbia River

(40

F
vill

(408

M
Pele

(409

An
and c
valley
Valle
profu
la Pr
North

(410.)

Thi
often
lobed,
(*Fowl*
to the

123

(411.)

Rive
of the
the Ma

- (407.) **R. cathartica**, Linn. Buckthorn.

Frequently planted for hedges and then left to run wild, as at Belleville and Castleton, Ont.

XXVIII. VITACEÆ. VINE FAMILY.

122. VITIS, Tourn. (GRAPE.)

- (408.) **V. Labrusca**, Linn. Northern Fox-Grape.

Moist thickets, along Lake Erie. Abundant on Pelee Point and Pelee Island. (*Macoun.*) Vicinity of Hamilton, Ont. (*Buchan.*)

- (409.) **V. cordifolia**, Lam. Frost Grape.

V. vulpina, Muhl. Hook. Fl. I., 115.

Annapolis, N.S. (*Lawson.*) Very abundant throughout Ontario; and often producing almost impenetrable thickets in river and stream valleys. Frequent in Quebec, from the Island of Orleans westward. Valley of the Red River, near Emerson. (*Dawson.*) Said to grow in profusion in the valley of the Assiniboine and north-west of Portage la Prairie, Man. The writer has never noticed it in any part of the North-west, except the Assiniboine valley.

- (410.) **V. riparia**, Michx. Fl. II., 231.

V. cordifolia, var. *riparia*, Gray, Manual, 113.

This and the preceding species grow in the same situations, and are often confounded. This species may be easily known by its deeply lobed, smaller and thinner leaves. On the shore of Grand Lake, N.B. (*Fowler's Cat.*) Frequent in western Ontario. (*Macoun.*) Extending to the south end of Lake Winnipeg, in Lat. 52°. (*Richardson.*)

123. AMPELOPSIS, Michx. (VIRGINIAN CREEPER.)

- (411.) **A. quinquefolia**, Michx. Hook. Fl. I., 114.

Cissus hederacea, Pers. Pursh, 170.

River banks and low thickets, from Grosse Isle, Quebec, to the valley of the Assiniboine, Man. Common in cultivation. Not reported from the Maritime Provinces, except as a cultivated species.

XXIX. SAPINDACEÆ. SOAPBERRY FAMILY.

124. STAPHYLEA, Linn. (BLADDER-NUT.)

- (412.)
- S. trifolia**
- , Linn. American Bladder-Nut.

Moist or rich thickets, and river banks. St. Martin's, Quebec. (*Holmes*.) Frequent, from Ottawa to the Georgian Bay. A beautiful shrub and worthy of cultivation.

125. ÆSCULUS, Linn. (HORSE-CHESTNUT,)

- (413.)
- Æ. Hippocastanum**
- , Linn. Horse-chestnut.

This tree is extensively cultivated from the Atlantic to Lake Huron. The native species have been introduced in a number of places and succeed well. *Æ. glabra*, Willd. (Ohio Buckeye) is seen at Trenton and Toronto, and the Red Buckeye in Toronto and London.

125. ACER, Tourn. (MAPLE.)

- (414.)
- A. Pennsylvanicum**
- , Linn. Striped Maple.

A. striatum, DuRoi. Pursh, 267.

Cool, rocky, or sandy woods. Not scarce in Nova Scotia. (*McKay*.) Rich woods, N.B. Common. (*Fowler's Cat.*) Very common in Quebec and northern Ontario, and west to Lake Superior.

- (415.)
- A. spicatum**
- , Lam. Mountain Maple.

A. montanum, Ait. Hook. Fl. I., 111.

Newfoundland. (*Morrison*.) Very common in damp or wet woods, from Nova Scotia to the western part of Lake Winnipegosis and Red Deer River and Porcupine Mountain, Man., Lat. 53°. (*Macoun*.) James's Bay and north-westward to Island Lake, above York Factory. (*R. Bell*.)

- (416.)
- A. macrophyllum**
- , Pursh. Broad-leaved Maple.

This species grows to a large size on Vancouver Island and in the valley of the Fraser, below Yale, B.C. It is a magnificent tree and must be very beautiful in cultivation.

- (417.)
- A. circinatum**
- , Pursh. Vine Maple.

Very common in the lower valley of the Fraser and on Vancouver

2. Billings Bridge

Quebec.
beautiful

)

Huron.
lakes and
Trenton

McKay.)
Quebec

t woods,
and Red
Macoun.)
Factory.

d in the
and must

ancouver

14. The

Isle
on

(41)

V
about
at 8
(Ma
(Da
(419)

H
in su
Super
Wood
ang c
Porta
Va

App
Ontar
more
(420.)

r App
the K
waaks
River
ward, t
ticular
taken f
(421.)

Very
Mud P
range th

Island. This species forms almost impenetrable thickets in the forests on the west coast.

(418.) **A. glabrum**, Torrey.

A. barbatum, Dougl. Hook. Fl. I., 113.

A. tripartitum, Nutt. Torr. & Gray, Fl. I., 247.

Valleys, near springs, on the west side of the Rocky Mountains, about the sources of the Columbia. (*Douglas*.) Vancouver Island and at Spence's Bridge, B. C. In the Bow River Pass, above Morley. (*Macoun*.) S. Kootanie Pass and mountains near Waterton Lake. (*Dawson*.)

(419.) **A. saccharinum**, Wang. Sugar Maple.

A. barbatum, Michx. Fl. II., 252.

Head of the Bay of St. George, Nfld. (*J. Bell*.) Very common in suitable localities, from Nova Scotia to the western end of Lake Superior, and thence in a few isolated patches to the Lake of the Woods. Northward, it extends to Lake St. John and Lake Temiscaming on the Ottawa. North of Lake Superior, it extends to the Long Portage on the Michipicotin River. (*R. Bell*.)

Var. **nigrum**, Torr. & Gray, Fl. I., 248.

A. saccharinum, Michx. Fl. II., 252.

A. nigrum, Michx. f. Arbr. Amer. II., 238.

Apparently a common tree, from Ottawa, westward throughout Ontario. It may be known from the ordinary form by its paler and more pubescent leaves.

(420.) **A. dasycarpum**, Ehrh. Silver, or White Maple.

A. eriocarpum, Michx. Fl. II., 253.

Apparently a rare tree in the east. A few trees at Harris' Cove on the Kennebecasis; vicinity of Fredericton, N.B.; mouth of the Nashwaakisis, and shore of Grand Lake. (*Fowler's Cat*.) Rare along the River St. Francis, Q. (*Brunet*.) Very abundant from Ottawa westward, throughout Ontario. In the neighborhood of Belleville it is particularly abundant, and the fine shade trees which adorn that city are taken from the low grounds in the vicinity. (*Macoun*.)

(421.) **A. rubrum**, Linn. Red, or Soft-Maple.

A. coccineum, Michx. f. Arbr. Amer. II., 203.

Very common in swamps and low woods from the Atlantic to the Mud Portage on the Dawson Route. Slightly more northern in its range than the sugar maple. (*R. Bell*.)

126. NECUNDO, Moench. (ASH-LEAVED MAPLE.)

- (422.) **N. aceroides**, Moench. Box-Elder.

Acer Negundo, Linn. Pursh, 268.

Negundo fraxinifolium, Nutt. Hook. Fl. I., 114.

A few trees of this species are found near Toronto, in the valley of the Humber, about two miles from its mouth. Eleven miles up the Kaministiquia, west of Lake Superior. On an island in the Lake of the Woods. Abundant in all the valleys of the tributaries of the Red River and of the Saskatchewan, coming from the south; also abundant on the streams flowing into Lake Winnipegosis. It grows very rapidly when planted in any part of Ontario. This is the "sugar maple" of Manitoba and the North-west, and is destined to be the shade tree of all the prairie cities.

XXX. ANACARDIACEÆ. SUMACH FAMILY.**127. RHUS, Linn. (SUMACH.)**

- (423.) **R. typhina**, Linn. Stag-horn Sumach.

R. viridiflora, DC. Prod. II., 67.

On dry, rocky, or gravelly knolls, or along river margins, or in fence corners. Common in suitable localities, from Nova Scotia to the west coast of Lake Huron.

- (424.) **R. glabra**, Linn. Smooth Sumach.

Canada, and as far north as the Saskatchewan. (?) (*Richardson*.) Chain Lakes, N.S. (*Sommers*.) Vicinity of London, Ont. (*Saunders*.) Very abundant on dry, rocky ground, along the Rivers Moira and Trent; also, at Queenston Heights and around Amherstburg, Ont.; Lake Nemikin, Dawson Route, west of Lake Superior. (*Macoun*.) Very likely overlooked in many parts of the country.

- (425.) **R. copallina**, Linn. Dwarf Sumach.

Rocky places; very rare in Canada. Thousand Islands, River St. Lawrence. (*Rev. J. K. McMorine*.)

- (426.) **R. venenata**, DC. Poison Sumach.

Occasional in swamps in western Ontario; Westminster Ponds, London, Ont. (*Burgess*.) Swamps near Weston, Ont. (*Tyrrell*.)

LE.)

valley of
up the
Lake of
the Red
abundant
rapidly
apple" of
tree of all

in fence
the west

hardson.)
launders.)
oira and
g, Ont.;
Macoun.)

River St.

nds, Lon-
)

429. Near Lake Stora.

(42

C
Sasl
(Hu
V

Cl
in the
Rail
very
(428.

On
(Dow
(429.

Dry
along
burg,
lagan
Huro
Var

Dry
katch
south
paralle

(430.)

Abun
tains.

(427.) **R. Toxicodendron**, Linn. Poison Ivy.

R. Toxicodendron, var. *quercifolium*, Michx. Fl. I., 183.

Common in thickets and in fence corners, from Nova Scotia to the Saskatchewan, at Fort Edmonton. (*Macoun.*) Woods near Yale, B.C. (*Hill.*)

Var. **radicans**, Torrey.

R. radicans, Linn. Hook. Fl. I., 127.

R. Toxicodendron, var. *a. vulgare*, Michx. Fl. I., 183.

Climbing frequently over fifty feet up both dead and living trunks, in the forest west of St. Thomas, on the line of the Canada Southern Railway, Ont. (*Macoun.*) Vicinity of London, Ont. (*Burgess.*) A very distinct variety, which almost deserves the rank of a species.

(428.) **R. diversiloba**, Torr. & Gray.

R. lobata, Hook. Fl. I., 127, not Poir.

On the outskirts of woods in dry soils of North-west America. (*Douglas.*)

(429.) **R. aromatica**, Ait. Fragrant Sumach.

Dry soil along river banks and on waste, rocky ground. Abundant along the rivers Moira and Trent, Rice Lake Plains, and at Amherstburg, Ont. (*Macoun.*) Banks of Niagara and Detroit Rivers. (*Mac-lagan.*) Wolfe Island, opposite Kingston; Whiskey Island, Lake Huron. (*J. Bell.*) Maline River, Dawson Route. (*Macoun.*)

Var. **trilobata**, Gray.

R. trilobata, Nutt. Torr. & Gray, Fl. I., 219.

Dry, barren soil on river banks. At the Elbow of the South Saskatchewan, near Strong Current Creek, N.W.T. (*Macoun.*) Bad lands south of Woody Mountain, and eastward to Pyramid Creek on the 49th parallel. (*Dawson.*)

XXXI. LEGUMINOSÆ. PEA FAMILY.

128. **THERMOPSIS**, R. Brown.(430.) **T. rhombifolia**, Richards.

Cytisus rhombifolius, Nutt. Pursh, 741.

Abundant on dry, open prairie, from Manitoba to the Rocky Mountains. Especially common northwest-ward from Moose Mountain to

Edmonton. (*Macoun.*) First Crossing of the Souris River and westward, in damp spots on the prairie and hillsides, N. W. T. (*Dawson.*)

(431.) **T. montana**, Nutt.

T. fabacea, Hook. Fl. I., 128, not DC. Macoun's Cat., No. 489.

To be looked for along the southern boundary of British Columbia.

129. LUPINUS, Tourn. (LUPINE.)

(432.) **L. littoralis**, Dougl.

L. versicolor, Lindl. Torr. & Gray, Fl. I., 376.

L. Nutkatensis, var. *glaber*, Hook. Fl. I., 163.

Along the coast of British Columbia, near the southern boundary. (*Douglas.*) On the coast of Vancouver Island. (*Watson.*) The root of this plant is eaten, and called "Chinook Liquorice."

(433.) **L. perennis**, Linn. Perennial Lupine.

Dry, sandy soil; not uncommon west of Toronto, also on the G. T. R. track near Sarnia. Common on Rice Lake Plains, near Castleton, Northumberland Co., Ont. (*Macoun.*) Very common in the vicinity of London, Ont. (*Burgess.*) Plains of the Rivière aux Sables, south of Lake Huron. (*Gibson.*) Sandwich, Ont. (*Maclean.*) Bosanquet, Ont. (*McGill Coll. Herb.*)

(434.) **L. arcticus**, Watson, Rev. Lup., 526.

L. perennis, Richards. Hook. Fl. I., 163, in part.

Shores of the Arctic Sea. (*Richardson.*) Cape Mulgrave, in Behring's Straits. (*Beechy.*) Kotzebue Sound. (*Rothr. Alaska.*) Vancouver Island. (*C. B. Wood.*) Bear Lake. (*Richardson.*) Polar Sea. (*Dean & Simpson.*) Both east and west of Mackenzie River, on the coast. (*Simpson.*)

(435.) **L. sericeus**, Pursh, 468.

On dry ground, above Spence's Bridge, B.C. (*Hill.*)

(436.) **L. leucophyllus**, Dougl.

L. plumosus, Dougl. Hook. Fl. I., 165.

Mountains, near the sources of the Columbia. (*Douglas.*)

(437.) **L. ornatus**, Dougl.

L. leucopsis, Agardh. Torr. & Gray, Fl. I., 378.

L. argenteus, Agardh. Torr. & Gray, Fl. I., 377, in part.

Near the source of the Columbia; sparingly. (*Douglas.*)

d west-
(Lawson.)

ambia.

oundary.
root of

G. T. R.
stleton,
vicinity
south of
anquet,

n Behr-
Van-
lar Sea.
on the

(4

(43

V

Flo
on

(44

L

Sasi
Hill
Riv

(44

M

(442

A
bour

(443

Al
Yale

(444

Ja
Islan
Islan
(Roth

Va

Ou

(445.)

Roc
mond,
the tr

(438.) **L. laxiflorus**, Dougl.*L. arbusatus*, Dougl. Hook. Fl. I., 164.Columbia River. (*Douglas.*) Vancouver Island. (*Watson.*)(439.) **L. argenteus**, Pursh, var. **argophyllus**, Watson.

Very abundant on the top of the Cypress Hills, east of Fort Walsh. Flowers blue or ochroleucous. (*Macoun.*) South of Woody Mountain, on the 49th parallel, and at Wood End; also, Belly River. (*Dawson.*)

(440.) **L. Kingii**, Watson. Rev. Lup., 534.

Dry sand hills, five miles west of the northern Elbow of the South Saskatchewan. Western end of Stinking Lake, north of the Cypress Hills, east of the Battleford Trail, N.W.T. (*Macoun.*) Along the Belly River. (*Dawson.*)

(441.) **L. minimus**, Dougl.Mountain valleys near the source of the Columbia. (*Douglas.*)(442.) **L. Lyallii**, Gray.

Alpine summits of the Cascades, on the British Columbia southern boundary. (*Lyall.*)

(443.) **L. micranthus**, Dougl., var. **bicolor**, Watson.*L. bicolor*, Lindl. Hook. Fl. I., 162. Macoun's Cat., No. 382.

Abundant in the neighborhood of Victoria, Vancouver Island, and at Yale, B.C., on the mainland. (*Macoun.*)

(444.) **L. Nootkatensis**, Donn.

Jasper House, east of Yellow-Head Pass. (*Burke.*) Queen Charlotte Islands. (*Dawson.*) Port Moody, B. C. (*Hill.*) From Vancouver Island to the Aleutian and St. Paul Islands. (*Ledebour.*) Fort Youcon. (*Rothr. Alask.*)

Var. **Unalaskensis**, Watson. Rev. Lup., 524.Ounalashka Island. (*Eschscholtz.*) Port Mulgrave. (*Barclay.*)(445.) **L. polyphyllus**, Lindl.*L. Nootkatensis*, var. *glaber*, Hook. Fl. I., 163.

Rocky Mountains, north of the Smoky River, in Lat. 55°. (*Drummond.*) Pine Pass, Rocky Mountains, Lat. 55°. (*Dawson.*) Along the trail, between Fort St. James and Fort Macleod, B. C. (*Macoun.*)

Excluded Species.

Lupinus pusillus, Pursh. Hook. Fl. I., 162.

South of our limits.

L. lepidus, Dougl. Hook. Fl. I., 163. Macoun's Cat., No. 390.

South of our limits.

L. aridus, Dougl. Hook. Fl. I., 165.

May be found on the Upper Columbia, in British Columbia.

L. Sabinii, Dougl. Hook. Fl. I., 166. Macoun's Cat., No. 383.

South of our limits.

L. sulphureus, Dougl. Hook. Fl. I., 166.

South of our limits.

130. ULEX, Linn. (COMMON GORSE, OR WHIN.)

(446.) **U. Europæus**, Linn. Whin.

Growing wild in the vicinity of Victoria, Vancouver Island. Escaped from cultivation. (*Macoun.*)

131. SAROTHAMNUS, Linn. (BROOM.)

(447.) **S. scoparius**, Koch. Common Broom.

Cytisus scoparius, DC. Macoun's Cat., No. 495.

Abundant in thickets around Victoria, Vancouver Island. Escaped from cultivation. (*Macoun.*) Naturalized at Shelbourne, N.S. (*Mr. P. Jack.*)

132. TRIFOLIUM, Linn. (CLOVER. TREFOIL.)

(448.) **T. megacephalum**, Nutt. Great-headed Clover.

Lupinaster macrocephalus, Pursh, 479.

In the mountains on the southern boundary of British Columbia. (*Lyall.*)

(449.) **T. longipes**, Nutt. Long-stemmed Clover.

Along the southern boundary of British Columbia. (*Watson.*)

90.

83.

N.)

Escaped

Escaped
(Mr.

..)

lumbia.

)

C

(

I

(

(

(

w

(

Isl

(4

C

(45

A

Isle

- (450.) **T. arvense**, Linn. Rabbit-foot, or Stone Clover.

Naturalized, in old fields, from Europe. Richibucto, N.B. Along the railway track, near St. John, N.B. (*Fowler's Cat.*) Common at Rivière du Loup, Q. (*Thomas.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Brockville road, near Conway's Creek, Ont. (*Billings.*) Neeropolis, Toronto, and at Niagara Falls. (*Macoun.*) Dundurn Castle, Hamilton, Ont. (*Logie.*)

- (451.) **T. pratense**, Linn. Common Red Clover.

Cultivated throughout Canada, and found everywhere along the borders of fields.

- (452.) **T. reflexum**, Linn. Buffalo Clover.

T. Pennsylvanicum, DC. Hook. Fl. I., 131.

Only found in south-western Ontario, on islands in the Detroit River. (*Maclean.*) About Sandwich and Amherstburg. (*Douglas.*)

- (453.) **T. repens**, Linn. White, or Dutch Clover.

Very common by waysides, in pastures and meadows, and borders of woods. Naturalized, or possibly indigenous.

- (454.) **T. involucreatum**, Willd.

T. Wormskjoldii, Lehm. Torr. & Gray, Fl. I., 692.

T. fimbriatum, Lindl. Hook. Fl. I., 133. Macoun's Cat., Nos. 397 & 398.

T. spinulosum, Dougl. Hook. Fl. I., 133.

Abundant on Vancouver Island, around Victoria. (*Macoun.*)

- Var. **heterodon**, Watson.

T. heterodon, Torr. & Gray, Fl. I., 318.

Along the coast of British Columbia, as far north as Queen Charlotte Islands. (*Dawson.*)

- (455.) **T. tridentatum**, Lindl.

T. involucreatum, Smith. Hook. Fl. I., 133.

T. aciculare, Nutt. Torr. & Gray, Fl. I., 319.

T. polyphyllum, Nutt. Torr. & Gray, Fl. I., 319.

Common around Victoria, Vancouver Island. (*Macoun.*)

- (456.) **T. pauciflorum**, Nutt. Macoun's Cat., Nos. 393, 400.

T. microcephalum, var. *glabrum*, Hook. Fl. I., 132.

T. variegatum, Nutt. Torr. & Gray, Fl. I., 317.

Abundant on rocks close to the shore, near Victoria, Vancouver Island. (*Macoun.*)

(457.) **T. microcephalum**, Pursh.

Growing with the preceding, but quite hairy, and with more compact heads, with more and smaller flowers. (*Macoun.*)

(458.) **T. microdon**, Hook. & Arn.

Southern boundary of British Columbia. (*Lyall.*)

(459.) **T. depauperatum**, Desv.

T. amplexans, Macoun's Cat., No. 399.

Quite common in the neighborhood of Victoria, Vancouver Island. (*Macoun.*)

(460.) **T. agrarium**, Linn. Hop-Clover.

Sparingly introduced in some localities. Fields, Bedford, N. S. (*Lawson.*) Queensbury; common near Fredericton and other localities, N.B. (*Fowler's Cat.*) Between Trenton and the Carrying Place at the head of the Bay of Quinte, Ont. (*Macoun.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Chatham, Ont., and near Montreal, Q. (*McGill Coll. Herb.*)

(461.) **T. procumbens**, Linn. Low Hop-Clover.

Naturalized in old fields and parks. Pictou and Windsor, N.S., not common. (*McKay.*) Sparingly in sandy ground at Richibucto, also at Grand Menan and St. Andrews, N.B. (*Fowler's Cat.*) Vicinity of Quebec. (*Brunet.*) Beauharnois County, Q. (*McGill Coll. Herb.*) Roadside, west of Ottawa. (*Whyte.*) Point Henry, at Kingston; and University Park, Toronto. (*Macoun.*) Near London, Ont. (*Burgess.*)

(462.) **T. hybridum**, Linn. Alsiek.

Cultivated fields and along fences. This species is extensively cultivated both in Ontario and the eastern provinces.

(463.) **T. resupinatum**, Linn. Reversed Trefoil.

On ballast heaps at St. John, N.B. (*Fowler's Cat.*) Vicinity of Quebec. (*Ami.*)

(464.) **T. ornithopodioides**, Linn. Bird's-foot Trefoil.

Sparingly introduced on ballast heaps at St. John, N.B. (*Fowler's Cat.*)

133. MELILOTUS, Tourn. (MELILOT.)(465.) **M. alba**, Lam. Sweet Clover.

M. officinalis, Pursh. Hook. Fl. I., 130.

M. leucantha, Koch. Torr. & Gray, Fl. I., 321.

com-

and.

N. S.
ities,
t the
awa.
McGill

, not
also
ty of
(*terb.*)
and
(*jess.*)

culti-

ty of

(*Cat.*)

July 2. 5. } Mr. Laughlin. 8. 9. 82.

471, Hamilton. Old. Jm Buchanan.

Naturalized. Roadsides, waste places, and in old gardens in the neighborhood of cities and towns.

- (466.) **M. officinalis**, Willd. Yellow Melilot.

Naturalized at Pictou and Halifax, N.S. In New Brunswick, and at Quebec, Montreal, Ottawa, Belleville, Toronto, and London.

134. **MEDICAGO**, Linn. (MEDICK.)

- (467.) **M. lupulina**, Linn. Black Medick.

Very abundant on roadsides, in cultivated fields, and waste places generally throughout Ontario. It is also naturalized in the Maritime Provinces and Quebec; and frequent in British Columbia.

- (468.) **M. denticulata**, Willd. Bur-Clover.

Introduced at St. John, N.B. (*Fowler's Cat.*) Introduced at Dundas, Ont., in wool, from Brazil. (*Hynes.*)

- (469.) **M. sativa**, Linn. Lucerne.

Introduced into sandy fields near Wooler, Northumberland Co., Ont., and at Royston Park, Owen Sound. (*Macoun.*) Niagara Falls and near Toronto. (*Burgess.*)

- (470.) **M. maculata**, Willd. Spotted Medick.

Introduced with ballast from Europe. Carleton, N.B. (*Hay.*)

135. **LOTUS**, Linn. (LOTUS.)

- (471.) **L. corniculatus**, Koch.

Apparently naturalized at Fairville, N.B. (*Fowler's Cat.*) Found at Ballast wharf, St. John, N.B. (*Hay.*)

136. **HOSACKIA**, Dougl. (HOSACKIA.)

- (472.) **H. bicolor**, Dougl. Hook. Fl. I., 134.

On the Columbia, near its source in British Columbia. (*Douglas.*)

- (473.) **H. decumbens**, Benth. Hook. Fl. I., 134.

Along the coast of southern British Columbia, and possibly on the south coast of Vancouver Island. (*Macoun.*)

- (474.) **H. parviflora**, Benth. Hook. Fl. I., 134.

On grassy slopes along the coast at Victoria, Vancouver Island.
(Macoun.)

- (475.) **H. Purshiana**, Benth.

H. unifoliata, Hook. Fl. I., 135.

Lotus sericeus, Pursh, 489.

H. pilosa, Nutt. Torr. & Gray, Fl. I., 327 & 692.

H. clata, *floribunda*, and *mollis*, Nutt. Torr. & Gray, Fl. I., 327.

Along the shores of southern British Columbia. (Cowley.)

132. PSORALEA, Linn. (PSORALEA.)

- (476.) **P. argophylla**, Pursh. Hook. Fl. I., 136.

Dry soils on the banks of the Red River, Lat. 50°, to the Saskatchewan, in Lat. 54°, from Carlton to Edmonton. (Drummond.) Very abundant on the whole prairie region from the Red River to the Rocky Mountains. (Macoun.)

- (477.) **P. esculenta**, Pursh. "Cree Turnip."

P. brachiata, Dougl. Hook. Fl. I., 137.

Plains of the Saskatchewan from Carlton to Edmonton. (Drummond.) Abundant on dry, sandy soil from the Red River to the Rocky Mountains.

- (478.) **P. lanceolata**, Pursh. Hook. Fl. I., 135.

P. elliptica, Pursh, 741.

P. laxiflora & *scabra*, Torr. & Gray, Fl. I., 299 & 300.

On the Saskatchewan from Carlton to Edmonton. (Drummond.) Near the source of the Columbia. (Douglas.) On the sand hills on the "River that Turns," and at Gull Lake, north of Cypress Hills, N.W.T. (Macoun.)

- (479.) **P. physodes**, Dougl. Hook. Fl. I., 136.

Open, sandy and gravelly soils along the upper part of the Columbia. (Douglas.)

138. AMORPHA, Linn. (FALSE INDIGO.)

- (480.) **A. canescens**, Nutt. Lead Plant.

Abundant on the plains of the Red River, in Lat. 50°. (Douglas.) On a piece of bushy ground at Portage la Prairie, Man., 1872. (Macoun.)

land.

St. cautilosa (Bourne)

atche-
Very
rocky

Drum-
rocky

mond.)
on the
W.T.

mbia.

glas.)
1872.

(

I

(

(

d

(

ot

ab

(4

(4

be

(4

San

the

La

Ne

Ab

Riv

V

I

born

- (481.) **A. fruticosa**, Linn. False Indigo.

Limestone rocks between Winnipeg and Selkirk, along the Red River, its most northern range. (*Douglas*.)

- (482.) **A. microphylla**, Pursh. Macoun's Cat., No. 422.

A. nana, Nutt. Hook. Fl. I., 139.

Abundant on the plains of the Red River, in Lat. 50°. (*Douglas*.)
Common along the Assiniboine, between Portage la Prairie and Brandon. (*Macoun*.)

139. PETALOSTEMON, Michx. (PRAIRIE CLOVER.)

- (483.) **P. candidus**, Michx. White-flowered Prairie Clover.

Banks of the Saskatchewan, and upon the Red Deer and Eagle Hills of that river. (*Drummond*.) On the Red River. (*Douglas*.) Very abundant on the slopes of gravel hills throughout the prairie region. (*Macoun*.)

- (484.) **P. violaceus**, Michx. Purple-flowered Prairie Clover.

P. villosus, Nutt. Pl. Bourgeau, 255.

In the same situations as the preceding species, but a much more beautiful and showy plant.

140. GLYCYRHIZA, Tourn. (WILD LIQUORICE.)

- (485.) **G. lepidota**, Pursh. Liquorice Root.

Fort Erie, opposite Buffalo, at the foot of Lake Erie. (*Judge Clinton*.) Sand hills, mouth of Rainy River, Lake of the Woods. Throughout the prairie region, in thickets or along river banks, and northward to Lake Athabasca, and westward to the Rocky Mountains. (*Macoun*.) Nelson River, between Lake Winnipeg and Hudson's Bay. (*R. Bell*.) Abundant on the Red, Assiniboine, Saskatchewan, and Athabasca Rivers. (*Drummond & Douglas*.)

Var. **glutinosa**, Watson, Bot. Cal. I., 144.

G. glutinosa, Nutt. Torr. & Gray, Fl. I., 298. Macoun's Cat., No. 459.

In the upper valley of the Columbia. (*Douglas*.) Along the southern border of British Columbia. (*Lyall*.)

141. ROBINIA, Linn. (LOCUST-TREE.)

- (486.) **R. Pseudacacia**, Linn. Common Locust.

Cultivated and growing spontaneously from both suckers and seeds. From Nova Scotia to western Ontario. It becomes a large tree and is often 60 feet high.

- (487.) **P. viscosa**, Vent. Clammy Locust.

P. hispida, Macoun's Cat., No. 424.

Cultivated with the preceding, but never attaining a large size. Both species are very showy and are much valued for ornamental purposes.

142. ASTRACALUS, Linn. (MILK VETCH.)

- (488.) **A. lentiginosus**, Dougl. Hook. Fl. I., 151.

A. diaphanous, Dougl. Hook. Fl. I., 151.

Barren grounds in the valley of the Columbia. (*Douglas*.) Nicola Valley, B.C. (*Dawson*.)

- (489.) **A. caryocarpus**, Ker. Hook. Fl. I., 150.

Hilly grounds of the Saskatchewan, especially about Carlton. (*Douglas*.) Quite common on the prairie, from the Red River, westward. It grows in large tufts, which lie flat on the ground in fruit. (*Macoun*.)

- (490.) **A. Lyallii**, Gray.

Probably in the mountains, along the southern boundary of British Columbia. (*Lyall*.)

- (491.) **A. Canadensis**, Linn. Canadian Milk Vetch.

A. Carolinianus, Linn. Pursh, 472.

River banks and rocky margins of fields. Vicinity of Quebec to the Rocky Mountains, and north to Nelson River, near Hudson's Bay.

- (492.) **A. adsurgens**, Pall. Hook. Fl. I., 149.

A. striatus, Nutt. Torr. & Gray, Fl. I., 330.

Plains of the Saskatchewan and Assiniboine Rivers, as far as the mountains. (*Richardson*.) Very abundant on the prairie, from the Red River to the Rocky Mountains, and north to Green Lake, Lat 56°. (*Macoun*.) Nelson River, between Lake Winnipeg and the coast of Hudson's Bay. (*R. Bell*.) Common along the 49th parallel, and at Woody Mountain. (*Dawson*.)

ceds.
nd is

size.
ental

icola

Doug-
ward.
oun.)

itish

o the

s the
the
56°.
st of
d at

C
a
C
I
I
n
e
Z

(-

(-

on

(-

C.

(4

Be

on

Tr

Riv

Sou

Lat

(49

V

(49

A

Lab

high

coun

Chun

- (493.) **A. hypoglottis**, Linn. Hook. Fl. I., 148.

A. goniatus, Nutt. Torr. & Gray, Fl. I., 330.

Dry hills of the Saskatchewan, and on the Eagle and Red Deer Hills of the same river, also on Red River, near Pembina. (*Douglas.*) Very abundant on the eastern prairie region and north to Peace River, east of the Rocky Mountains. (*Macoun.*) East coast of Hudson's Bay, Hayes River, and along Nelson River, near Hudson's Bay. (*R. Bell.*) Red River Prairie, First Crossing of Souris River, and Traders' Road, north of Woody Mountain, N.W.T. (*Dawson.*) Point Barrow and eastward along the Arctic coast. (*Capt. Pullen.*) Fort Youcon. (*W. H. Dall.*)

- (494.) **A. Drummondii**, Dougl. Hook. Fl. I., 153.

Eagle and Red Deer Hills of the Saskatchewan, also Carlton House. (*Douglas.*) On the Hand Hills and the hilly region to the east; also, on the Cypress Hills west of Fort Walsh, N.W.T. (*Macoun.*)

- (495.) **A. racemosus**, Pursh, 740.

Abundant on the Dirt Hills, and at Moose Jaw Creek, where the C. P. Railway crosses, N.W.T. (*Macoun.*)

- (496.) **A. aboriginum**, Richards.

Phaca aboriginum, Hook. Fl. I., 143.

From Lake Winnipeg to the Rocky Mountains, and as far north as Bear Lake, in Lat. 66°. (*Richardson & Drummond.*) Abundant on gravel on the west side of the Qu'Appelle Valley at the crossing of the Carlton Trail; on a gravel ridge on top of the Cypress Hills, and in the Bow River Pass, N.W.T. (*Macoun.*) Pembina Mountain and Short Creek, Souris River, near the 49th parallel. (*Dawson.*) Fort Confidence, Lat. 67°. (*Simpson.*)

- (497.) **A. glabriusculus**, Gray.

Phaca glabriuscula, Hook. Fl. I., 144.

Valleys of the Rocky Mountains. Lat. 52°-56°. (*Drummond.*)

- (498.) **A. oroboides**, Hornem., var. **Americanus**, Gray.

Phaca elegans, Hook. Fl. I., 144.

P. parviflora, Nutt. Torr. & Gray, Fl. I., 348.

A. oroboides, Hook. Arct. Pl., 289, in part.

Along the Ste. Anne des Monts River, Gaspé. (*Macoun.*) Coast of Labrador. (*McGill Coll. Herb.*) In the Rocky Mountains, and on the higher summits of the mountains. (*Drummond.*) In the elevated country north of Fort St. John, Peace River, Lat. 56°. (*Macoun.*) Churchill River. (*R. Bell.*)

(499.) **A. alpinus**, Linn.*A. secundus*, Michx. Fl. L., 66, not DC.*Phaca astragalina*, DC. Hook. Fl. L., 145.*A. Labradoricus*, Hook. Fl. L., 150.*A. Robbinsii*, Matthew Pl. Acad., 15, not Gray.

Newfoundland and Labrador. (*Morrison*.) Coast of Labrador. (*Butler*.) Nepisiquit River; also upper St. John, N.B. (*Fowler's Cat.*) At Macleod's Lake, northern British Columbia. (*Macoun*.) In the Rocky Mountains, lat. 52°-56°. (*Drummond*.) In the extreme Arctic regions. (*Richardson*.) Churchill and Nelson Rivers, near Hudson's Bay. (*R. Bell*.) Kotzebue Sound to Point Barrow, and Fort Youcon. (*W. H. Dall*.) Back's Great Fish River. (*Back*.)

(500.) **A. lotiflorus**, Hook. Fl. L., 152.*Phaca lotiflora*, Torr. & Gray, Fl. L., 349.

About Carlton, on the Saskatchewan. (*Drummond*.) Along the northern base of the Cypress Hills, at Setter's Farm, and on clay flats farther west; a rare species. (*Macoun*.) Spence's Bridge, B.C. (*Hill*.)

(501.) **A. Missouriensis**, Nutt.*A. melanocarpus*, Nutt. Hook. Fl. L., 150.

Plains of the Saskatchewan, and Eagle and Red Deer Hills of the same river. (*Richardson*.) Abundant on the margins of saline depressions and on clay flats at Long Lake and Moose Mountain, and westward to the Rocky Mountains. (*Macoun*.) Short Creek, Souris River. (*Dawson*.)

(502.) **A. Beckwithii**, Torr. & Gray.

Arid soil along the Thompson River, below Spence's Bridge, B.C. (*Macoun*.) Nicola Valley, near the same place. (*Dawson*.)

(503.) **A. Purshii**, Dougl. Hook. Fl. L., 152.*Phaca mollissima*, Nutt. Torr. & Gray, Fl. L., 350.

In abundance along the Thompson, below Spence's Bridge, B.C. (*Hill* & *Macoun*.)

(504.) **A. Cooperi**, Gray.*Phaca neglecta*, Torr. & Gray, Fl. L., 344.

Rocky ground and gravelly banks of rivers. Hillside, Gaspé Basin, Q.; Myersburg and vicinity of Marmora village, Northumberland Co., and Bruce Peninsula, Ont. (*Macoun*.) Vicinity of London, Ont., and on the Grand Manitoulin Island, Georgian Bay. (*Burgess*.) La Cloche and Whiskey Islands, Lake Huron. (*J. Bell*.) Hamilton, Ont. (*Logie*.) Montreal Island, Q.; Bosanquet, Ont. (*McGill Coll. Herb.*)

radior.
(*Cat.*)
in the
Arctic
dson's
oucon.

g the
y flats
(*Hill.*)

of the
depres-
d west-
River.

e, B.C.

e, B.C.

sin, Q.:
o., and
and on
Cloche
(*Logie.*)

(5

(5

(56

La
Pa
Riv
Ed
non
Mu

V

A
Beh

(50

O

(Me

(50

P
slop

(516

Pa
bord
the
of S

(511

Pl

(505.) **A. Gibbsii**, Kellogg.*A. cyrtoides*, Gray.Dry soil, Nicola Valley, B. C. (*Dawson*.) Specimens without fruit.(506.) **A. spelrocarpus**, Gray.On the Upper Columbia. (*Lyall*.)(507.) **A. frigidus**, Gray, var. **Americanus**, Watson.*Phaca frigida*, Richards. Pl. Bourgeau, 255.*P. frigida*, var. *Americana*, Hook. Fl. I., 140.

Woody regions of the Rocky Mountains, Lat. 52°-56°, north to Slave Lake, Lat. 61°. (*Richardson*.) On the mountains in the S. Kootanie Pass. (*Dawson*.) Cariboo Mountains, B.C. (*Cowley*.) On the Nelson River, near Hudson's Bay. (*R. Bell*.) Wooded country, between Edmonton and Peace River; Bow River Pass, above Morley; and in northern British Columbia. (*Macoun*.) On the coast between the Mackenzie and Coppermine Rivers. (*Simpson*.)

Var. **littoralis**, Watson.*Phaca frigida*, var. *littoralis*, Hook. Fl. I., 140.*Astragalus frigidus*, Rothr. Alask. 445.

Arctic shores, west of the Mackenzie River to Cape Lisburne, in Behring's Straits. (*Hooker*.) Kotzebue Sound. (*Rothr. Alask.*)

(508.) **A. microcystis**, Gray.

On the banks of Methy River, east of Portage La Loche—1875 (*Macoun*.)

(509.) **A. bisulcatus**, Gray.*Phaca bisulcata*, Hook. Fl. I., 145.

Plains of the Saskatchewan. (*Drummond*.) Very abundant on dry slopes, from Fort Ellice westward across the prairies. (*Macoun*.)

(510.) **A. pectinatus**, Dougl.*Phaca pectinata*, Hook. Fl. I., 141.

Pastures of the Saskatchewan, and on the Red Deer and Eagle Hills bordering on that river. (*Douglas*.) Common on gravelly slopes from the Souris west to the Rocky Mountains. (*Macoun*.) First Crossing of Souris River, N.W.T., on dry prairie. (*Dawson*.)

(511.) **A. flexuosus**, Dougl.*Phaca flexuosa*, Hook. Fl. I., 141.*P. elongata*, Hook. Fl. I., 140. Pl. Bourgeau, 255.

Plains of the Saskatchewan. (*Drummond*.) Abundant on elevated

and dry soils of the Red River and Assiniboine, Lat. 50°. (*Douglas*.) From the Red River westward to the Rocky Mountains; very abundant. (*Macoun*.) Red River prairie, Pembina Mountain, Woody Mountain and Short Creek, Souris River, N.W.T.; common. (*Dawson*.)

(512.) **A. collinus**, Dougl.

Phaca collina, Hook. Fl. I., 141.

On dry slopes of the mountains above Spence's Bridge, B. C. (*Dawson*.)

(513.) **A. multiflorus**, Gray.

A. tenellus, Pursh, 473.

Ervum multiflorum, Pursh, 739.

Phaca nigrescens, Hook. Fl. I., 143.

Homalobus multiflorus, Torr. & Gray, Fl. I., 351.

H. dispar, Nutt. Torr. & Gray, Fl. I., 350.

Astragalus nigrescens, Gray, Pl. Bourgeau, 255.

On the Saskatchewan to the Rocky Mountains, and as far north as Fort Franklin, on the Mackenzie River, in Lat. 65°. (*Richardson*.) Very abundant on the prairies west of Fort Ellice to the Rocky Mountains. (*Macoun*.) Spence's Bridge, B.C. (*Hill*.)

(514.) **A. Bourgovii**, Gray.

Rocky Mountains, Bow River Pass. (*Bourgeau*.) Rocky Mountains, S. Kootanie Pass (6000 feet.) (*Dawson*.)

(515.) **A. Palliseri**, Gray.

Rocky Mountains, Bow River Pass. (*Bourgeau*.)

(516.) **A. decumbens**, Gray.

Homalobus decumbens, Nutt. Torr. & Gray, Fl. I., 352.

On dry ground around Spence's Bridge, B. C. (*Macoun* & *Hill*.) Chilcoten Plains, B.C. (*Dawson*.)

(517.) **A. caespitosus**, Gray.

Homalobus caespitosus, & *canescens*, Torr. & Gray, Fl. I., 352.

On gravelly ridges in the centre of the Cypress Hills. (*Macoun*.) Dry bank, White Mud River, 49th parallel, south of Cypress Hills. (*Dawson*.)

(518.) **A. Kentrophyta**, Gray.

Kentrophyta montana, Nutt. Torr. & Gray, Fl. I., 353.

K. viridis, Nutt. Torr. & Gray, Fl. I., 353.

Borders of Stinking Lake, north of Cypress Hills, in sand. (*Macoun*.) Along Belly River, N.W.T. (*Dawson*.)

glas.)
abun-
oody
erson.)

B. C.

th as
lson.)
Moun-

tains,

Hill.)

coun.)
Hill.

coun.)

(

m

(

(

du

(5

ta

su

49

(5

(5

out

(52

V

wit

(52

L

Roc

Rive

(526

St

and

Rock

(519.) **A. triphyllus**, Pursh. ✓*Phaca caespitosa*, Nutt. Hook. Fl. I., 143.*P. argophylla*, Nutt. Torr. & Gray, Fl. I., 342.

Between Carlton and Edmonton, on the Saskatchewan. (*Drummond.*) On dry, gravelly hills, from the Souris to the Rocky Mountains. (*Macoun.*) Along the 49th parallel, east of Woody Mountain. (*Dawson.*)

(520.) **A. polaris**, Benth.

Re-discovered by Seemann at Eschscholtz Bay, in Kotzebue Sound, during the voyage of the "Herald." (*J. D. Hooker.*)

(521.) **A. pauciflorus**, Hook. Fl. I., 149.

Among the rocks in the more elevated regions of the Rocky Mountains. (*Drummond.*) Bed of the Bow River at Morley: also on the summit of the Cypress Hills. (*Macoun.*) S. Kootanie Pass, near the 49th parallel. (*Dawson.*)

(522.) **A. vaginatus**, Richards. Hook. Fl. I., 149.

Woody country, Lat. 54°.-64°. (*Richardson.*)

(523.) **A. — ?**

Upper part of the Nicola Valley, B.C. (*Dawson.*) Specimens without fruit.

(524.) **A. — ?**

Whipsaw Creek, B.C., June 17th, 1877. (*Dawson.*) Specimens without fruit.

143. OXYTROPIS, DC. (OXYTROPIS.)(525.) **O. podocarpa**, Gray.

O. arctica, var. *inflata*. Hook. Fl. I., 146.

Labrador and the Arctic regions. (*Gray.*) Highest summits of the Rocky Mountains, Lat. 52°-56°. (*Drummond.*) High elevations, Bow River Pass. (*Macoun.*) Rocky Mountains. (*Bourgeau.*)

(526.) **O. Uralensis**, DC., var. **pumila**, Ledeb.

O. arctica, R. Brown. Hook. Fl. I., 146, in part.

St. Paul's Island, Gulf of St. Lawrence. (*McKay.*) Arctic shores and islands. Kotzebue Sound and west coast of Alaska. (*Hooker.*) Rocky Mountains. (*Bourgeau.*)

(527.) **O. campestris**, DC. Hook. Fl. I., 147.*O. borralis*, DC. Hook. Fl. I., 145.

Islands in St. John River, N.B. (*Bailey*.) Edmonton and along the banks of the Upper St. John, N.B. (*Hay*.) Cliffs near Cape St. Louis, Gaspé coast. (*Macoun*.) Isle of Orleans, and coast of Labrador. (*Brunet*.) From Carlton to the Rocky Mountains, and as far as the sources of the Columbia (*Douglas*.) Bear Lake to the Arctic shores and islands. (*Richardson*.) At Spence's Bridge, B.C. Throughout the prairie region, very common. (*Macoun*.) Kotzebue Sound. (*Rothr. Alask.*) Baffin's Bay. (*Hooker*.)

Var. **viscida**, Watson.*O. viscida*, Nutt. Torr. & Gray, Fl. I., 341.*O. campestris*, ? Pl. Bourgeau, 256.

Saskatchewan Plains. (*Bourgeau*.) Bow River at the Blackfoot Crossing and at Morley, N.W.T. (*Macoun*.)

(528.) **O. Lamberti**, Pursh, 740.*O. Hookeriana*, Nutt. Torr. & Gray, Fl. I., 340.*O. Plattensis*, Nutt. Torr. & Gray, Fl. I., 340.*O. sericea*, Nutt. Torr. & Gray, Fl. I., 339.

Dry banks on the Red River and Saskatchewan. (*Douglas*.) Prairies in the valleys of the Rocky Mountains. (*Drummond*.) Very abundant throughout the prairie region. (*Macoun*.) North Antler Creek, White Mud River, and First Crossing of the Souris, N.W.T.; always on dry ground. (*Dawson*.)

(529.) **O. nana**, Nutt.? *O. argentata*, Pursh. Hook. Fl. I., 146.Woody country, Lat. 54°-64°. (*Richardson*.)(530.) **O. nigrescens**, Fisch. Hook. Fl. I., 147.Island of St. Lawrence in Behring's Straits. (*De Candolle*.)(531.) **O. splendens**, Dougl.

On limestone rocks of the Red River and south to Pembina. (*Douglas*.) Very abundant from Brandon, westward to the Rocky Mountains, throughout the prairie region. (*Macoun*.) Turtle Mountain, N.W.T. (*Dawson*.)

Var. **Richardsoni**, Hook. Fl. I., 148.*O. oxyphylla*, Richards. in Frankl. Journ. 17.

From Cumberland House on the Saskatchewan, north to Fort Frank-

along
ape St.
brador.
as the
shores
out the
(*Rothr.*

ackfoot

Prairies
undant
Creek,
ways on

(*Douglas.*)
untains,
N.W.T.

Frank-

1
(
a
E

(

A
R
S

(5

als
Jo
Ri
co
Pe
Th
(K
So
and

(5

1
Ar
wes
Dec
east
wes
Hil
low
Riv
bea

lin and Bear Lake, and west to the dry prairies of the Rocky Mountains. (*Richardson & Drummond.*) From Edmonton to the Peace River region, and through the Rocky Mountains to the Findley Branch of the Peace River, on the west side of the Rocky Mountains. (*Macoun.*)

(532.) ***O. deflexa*, DC.**

O. foliolosum, Hook. Fl. I., 146.

From Carlton to the Rocky Mountains, Lat. 54°. (*Drummond.*) Abundant from the middle crossing of the Little Saskatchewan to the Rocky Mountains; generally on the sides of coulees. (*Macoun.*) Southern British Columbia, in the dry region. (*Dawson.*)

144. HEDYSARUM, Tourn. (HEDYSARUM.)

(533.) ***H. boreale*, Nutt.**

H. alpinum, Richards. in Frankl. Journ. 17.

H. alpinum, var. *Americanum*, Michx. Fl. II., 274.

Newfoundland. (*McGill Coll. Herb.*) Grand Falls of the St. John, also on the Nepisiquit River, N.B. (*Fowler's Cat.*) Borders of Lake St. John, Q. (*Brunet.*) Labrador. (*Butler.*) Rocky banks of the Dartmouth River, Little Falls of the Magdalen River, and on cliffs along the Gaspé coast. Very abundant on the prairies, and extending north to the Peace River region. (*Macoun.*) North shore of Lake Superior. (*Agassiz.*) Throughout the wooded country and north to the Arctic circle. (*Richardson.*) Summit of Pine Pass, Lat. 55°. (*Dawson.*) Kotzebue Sound and Cape Lisburne. (*Rothr. Alask.*) Between the Mackenzie and Coppermine Rivers. (*Simpson.*)

(534.) ***H. Mackenzii*, Richards.**

H. boreale, Richards. Frankl. Journ., 745.

H. canescens, Nutt. Torr. & Gray, Fl. I., 357.

Barren grounds north of Lat. 64°; as far north as the shores of the Arctic Sea. (*Richardson.*) On the Saskatchewan, about Carlton and westward to the mountains. (*Drummond.*) On the Eagle and Red Deer Hills of the Saskatchewan. (*Douglas.*) On Hayes River and the east coast of Hudson's Bay. (*R. Bell.*) In great abundance 20 miles west of Moose Mountain; on the Cypress Hills; vicinity of the Hand Hills; in the Bow River Pass and on the banks of Peace River and the lower slopes of Mount Selwyn, Peace River Pass. (*Macoun.*) Youcon River, 50 miles west of Fort Youcon. (*Rothr. Alask.*) This is a very beautiful species. Its root is eaten by the Indians wherever it is found.

145. DESMODIUM, DC. (TICK TREFOIL.)**(535.) D. nudiflorum, DC.***Hedysarum nudiflorum*, Linn. Michx. Fl. II., 71.

Rich woodlands and sandy thickets. Rare eastward. About Quebec. (*Cleghorn.*) Papineau Wood, Montreal. (*Holmes.*) Rare in eastern Ontario. (*Billings.*) Oak Hills, 16 miles north of Belleville; near Brighton Village and at Niagara Falls, Ont. (*Macoun.*) Vicinity of Hamilton, Ont. (*Logie.*) London, Ont., not rare. (*Burgess.*)

(536.) D. acuminatum, DC.*Hedysarum acuminatum*, Michx. Fl. II., 72.

Rich woods; common throughout Ontario, and eastward in Quebec to the Isle of Orleans.

(537.) D. pauciflorum, DC.

Rich woods of western Ontario. Woods at Niagara Falls. (*Macoun.*) Vicinity of Hamilton, Ont. (*Logie.*) Prescott, Ont., rare. (*Billings.*) ?

(538.) D. rotundifolium, DC.*Hedysarum rotundifolium*, Michx. Fl. II., 72.

Dry, sandy woods, near London, Ont. (*Burgess.*)

(539.) D. cuspidatum, Hook.*Hedysarum cuspidatum*, Muhl. Pursh, 483.*H. bracteosum*, Michx. Fl. II., 73.*D. bracteosum*, DC. Hook. Fl. I., 154.

Rocky thickets; rather local. Meyersburg, Northumberland Co., Ont. (*Macoun.*) Vicinity of Ottawa. [?] (*Fletcher Fl. Ott.*) Hamilton, Ont. (*Buchan.*) Cayuga, St. Catharines, and Malden, Ont. (*MacLagan.*) Vicinity of London, Ont. (*Burgess.*) Near Fort Erie, rare; also, at Queenston Heights. (*Douglas.*)

(540.) D. canescens, DC.*Hedysarum canescens*, Linn. Pursh, 482.*H. viridiflorum*, Willd. Pursh, 482.

In moist soil, Malden, Ont. (*MacLagan.*)

(541.) D. Dillenii, Darling. Macoun's Cat., No. 469.*Hedysarum Marilandicum*, Willd. Pursh, 482.

Dry, rather open thickets, Queenston Heights. (*Macoun.*) Vicinity of Hamilton, Ont. (*Logie.*) Not rare at London, Ont. (*Burgess.*)

Quebec.
Eastern
near
vicinity of

Quebec's Lake - N. 100° E. - 100° E.

Quebec

(coun.)
(ngs.) ?

l Co.,
Hilton,
(agan.)
Also, at

vicinity
(ss.)

(

(

C

(

O

H

(

W

(5

(5

5

On

(54

I

Ma

(H

(54

I

Oak

Nia

(542.) **D. paniculatum**, DC.*Hedysarum paniculatum*, Linn. Pursh, 483.

Dry, sandy thickets. Rice Lake Plains, near Castleton, Ont. (Macoun.) At Hamilton, Ont. (Logie.) St. Catharines and Malden, Ont. (MacLagan.) Vicinity of London, Ont. (Burgess.)

(543.) **D. Canadense**, DC.*Hedysarum Canadense*, Linn. Pursh, 481.

Dry, rich woods or thickets; common throughout Quebec and Ontario: Fredericton and upper St. John, N.B. (Fowler's Cat.) Along Hammond River, King's Co., N.B. (J. Brittain.) Lake of the Woods. (Burgess.) As far north as Norway House, at the north end of Lake Winnipeg. (Hooker.)

(544.) **D. cillare**, DC.*Hedysarum cillare*, Muhl. Pursh, 482.*D. Marylandicum*, Macoun's Cat., No. 466.

Dry, sandy thickets, Queenston Heights, Ont., 1877. (Macoun.)

146. LESPEDEZA, Michx. (BUSH CLOVER.)(545.) **L. repens**, Barton.*L. procumbens*, Michx. Gray, Manual, 137.*L. prostrata*, Pursh. Hook. Fl. I., 156.

Sandy soil, Ontario. (Douglas.) The Dell, Ancaster, near Hamilton, Ont. (Loyie.) These very likely refer to the next species.

(546.) **L. reticulata**, Pers.*L. sessiliflora*, Michx. Fl. II., 70. in part.*L. violacea*, var. *sessiliflora*, Torr. & Gray, Fl. I., 367.*L. violacea*, Macoun's Cat., No. 475.

Dry copses and borders of woods. The Dell, Ancaster, Ont. (Logie.) Malden, Ont. (MacLagan.) Vicinity of London, Ont. (Burgess.) Canada. (Holmes.)

(547.) **L. hirta**, Ell.*L. polystachya*, Michx. Hook. Fl. I., 156.

Dry, sandy hillsides. Common about Sandwich, Ont. (Douglas.) Oak Hills, 11 miles north of Belleville; also, Queenston Heights and Niagara Falls, Ont. (Macoun.) Vicinity of Prescott, Ont. (Billings.)

Prince's Island, Lake Medad, near Hamilton, Ont. (*Logie*.) St. Catharines, Thorold, and Queenston, Ont. (*MacLagan*.) Rather common at London, Ont. (*Burgess*.)

(548.) ***L. capitata***, Michx.

Dry sandy soil, in thickets and open woods. Rice Lake Plains, Oak Hills, near Belleville, and Queenston Heights, Ont. (*Macoun*.) Gravel Pit, west of Prescott, and westward along the St. Lawrence (*Billings*.) Prince's Island, near Hamilton, Ont. (*Logie*.) Huron County, Ont. (*Gibson*.) Malden, Ont. (*MacLagan*.) Common at London, Ont. (*Burgess*.)

147. *VICIA*, Tourn. (VETCH. TARE.)

(549.) ***V. sativa***, Linn. Common Vetch.

Naturalized through cultivation, and by the agency of railways. It is more commonly found in railway cuttings and along embankments than in fields.

(550.) ***V. tetrasperma***, Loisel.

Errum tetraspermum, Linn. Hook. Fl. I., 158.

Introduced from Europe. Windsor and Halifax, N. (*Dawson*.) Abundant along the railway track near St. John, N.B. (*Fowler's Cat*.) Isle of Orleans, Q. (*Brunet*.) Longueuil, Q. (*MacLagan*.) Montreal, Q. (*McGill Coll. Herb*.) Vicinity of Ottawa. (*Fletcher Fl. Ott*.) Grassy meadows, Ontario. (*Douglas*.)

(551.) ***V. hirsuta***, Koch.

Errum hirsutum, Linn. Hook. Fl. I., 158.

Introduced in a few places. Along the railway near St. John, N.B. (*Fowler's Cat*.) Common in Quebec. (*Brunet*.) Common at Rivière du Loup, Q. (*Thomas*.) Garden weed in Ottawa and Perth, Ont. (*Whyte*.) Vicinity of Hamilton, Ont. (*Buchan*.)

(552.) ***V. Cracca***, Linn.

Newfoundland. (*Morrison*.) Common in Nova Scotia. (*McKay*.) Fields and waste places, N.B., not common. (*Fowler's Cat*.) Very common throughout Quebec. Collected at Ottawa, Prescott and Belleville, which latter is its western limit in Ontario. This is with us an eastern species.

(553.) ***V. Caroliniana***, Walter.

V. parviflora, Michx. Fl. II., 69.

River banks and lake shores. Bay of Quinte, both sides, rather

) St.
com-

s, Oak
Gravel
llings.)
z, Ont.
urgess)

ys. It
ments

wson.)
s Cat.)
eal, Q.
Grassy

, N.B.
Rivière
, Ont.

e Kay.)
Very
Belle-
us an

rather

son - Victoria

common. On the bank of the Detroit River at Amherstburg, Ont. (*Macoun*.) Chippawa, Navy Island, and Malden, Ont. (*MacLagan*.) Ontario, near the lakes. (*Douglas*.)

(554.) **V. Americana**, Muhl.

V. tridentata, Schw. Torr. & Gray, Fl. I., 272.

V. Oregana, Nutt. Macoun's Cat., No. 478.

Belledune, Restigouche, N. B. (*Chalmers*.) From the Falls of Niagara to the Pacific coast. Very abundant in the northern prairie region and in the wooded country, as far north as Bear Lake. It is also abundant in the Rocky Mountains and British Columbia, and north to Alaska.

Var. **linearis**, Watson.

Lathyrus linearis, Nutt. Torr. & Gray, Fl. I., 276.

L. dissitifolius, Nutt. Torr. & Gray, Fl. I., 277.

Very abundant throughout the prairie region, N.W.T. Not seen in the forest country. (*Macoun*.)

(555.) **V. gigantea**, Hook. Fl. I., 157.

Along the Pacific coast to Alaska. Queen Charlotte Islands. (*Dawson*.) Sitka, and Arctic coast. (*Roth. Alask.*)

148. LATHYRUS, Linn. (EVERLASTING PEA.)

(556.) **L. maritimus**, Bigel.

Pisum maritimum, Linn. Richards. in Frankl. Journ., 17.

L. pisiformis, Hook. Fl. I., 158.

Coast of Labrador. (*McGill Coll. Herb.*) Abundant on sea beaches, Nova Scotia, New Brunswick, and around the Gulf of St. Lawrence. James Bay, east side of Hudson's Bay, and north end of Lake Winnipeg. (*R. Bell*.) Sand beaches along the Great Lakes, quite common. (*Macoun*.) Muskoka Lakes and Georgian Bay. (*Burgess*.) Shores of the Arctic Sea. (*Richardson*.) Johnston's Strait, B. C. (*Dawson*.) Sitka and western coast of Alaska. (*Roth. Alask.*)

(557.) **L. venosus**, Muhl.

L. decaphyllus, Hook. Fl. I., 159.

From the Kaministiquia River, Lake Superior, across the continent to the Pacific Ocean. This species is abundant in the mixed prairie and forest country, north of Lat. 52°.

(558.) **L. ochroleucus**, Hook. Fl. I., 159.*L. pisiformis*, Richards. in Frankl. Journ., 17.

Mississquoi Lake, Q. (*McGill Coll. Herb.*) From Ottawa, in the forest country, west to the Coast Range, B.C.; abundant in northern British Columbia, and extending north on the Mackenzie to Bear Lake, and beyond the Arctic Circle.

(559.) **L. paluster**, Linn.

Coast of Labrador. (*McGill Coll. Herb.*) Magdalen Islands and Nova Scotia, New Brunswick, Quebec, Ontario, and across the mixed forest region to British Columbia. It is usually found in beaver meadows, along streams, or low thickets, in wet places.

Var. **myrtifolius**, Gray.

L. myrtifolius, Muhl. Macoun's Cat., No. 487.

L. stipulaceus, LeConte. Hook. Fl. I., 160.

L. venosus, var. *δ*. Torr. & Gray. Fl. I., 274.

Rocky banks of rivers. Common in New Brunswick. (*Fowler's Cat.*) Rather common in Quebec, and extending to the Sault Ste. Marie. (*Macoun.*) Near Fort Erie, and extending along the Niagara to Queenston. (*Douglas.*)

(560.) **L. pratensis**, Linn.

Escaped from cultivation at Hamilton, Ont. (*Buchan.*)

149. APIOS, Boer. (GROUND NUT. WILD BEAN.)(561.) **A. tuberosa**, Moench.

Glycine Apios, Linn. Michx. Fl. II., 63.

Along the margins of rivers and rocky banks. Keswick Ridge, and along the banks of the St. John River, at Fredericton; found also at St. Stephen, N.B. (*Vroom.*) West River, N.S. (*Lindsay.*) St. Nicholas, and Lotbinière, Q. (*Brunet.*) Islands in Lake St. Peter, Bécancour, Q. (*Provancher.*) Common in the western part of Quebec. (*McGill Coll. Herb.*) Rather common throughout Ontario in suitable localities.

150. PHASEOLUS, Linn. (KIDNEY BEAN.)(562.) **P. diversifolius**, Pers.

P. trilobus, Michx. Fl. II., 60.

On sandy beaches and banks. Montreal, Q., and Malden, Ont. (*MacLagan.*) Port Stanley, Lake Erie. (*Burgess.*) Amherstburg and

Stull. Deschamps.

forest
British
e, and

s and
mixed
beaver

s Cat.)
Marie.
ara to

N.)

ge, and
d also
) St.
Peter,
Quebec.
nitable

, Ont.
rg and

P
T
Jo

(5

th
tiq

(56

I
Col
san
Ont
(56

In
has

i53

(566

A
the r
The
bega
in di
when
out i
Ride
a cen

Pelee Point, Ont. (*Macoun.*) Vicinity of Hamilton, Ont. (*Buchan.*) This is doubtless the *P. helvolus* of *Saunders* and *Logie*. *Canadian Journal*, Vol. XV., p. 360.

151. AMPHICARPÆA, Ell. (HOG PEANUT.)

(563.) **A. monoica**, Ell.

Glycine monoica, Linn. Pursh, 485.

St. John River, N.B. (*Fowler's Cat.*) Abundant in moist thickets throughout western Quebec and Ontario, extending to the Kaministiquia River, above Fort William, Lake Superior. (*Macoun.*)

152. BAPTISIA, Vent. (FALSE INDIGO.)

(564.) **B. tinctoria**, R. Br. Wild Indigo.

Podalyria tinctoria, Lam. Michx. Fl. I., 265.

Dry or damp sandy woods. Vicinity of Hamilton, Ont. (*Logie.*) Colchester Township and Sandwich, Ont. (*MacLagan.*) Abundant in sandy thickets about half way between Essex Centre and Leamington, Ont. (*Macoun.*)

(565.) **B. leucantha**, Torr. & Gray.

B. alba, Hook. Fl. I., 129. *Macoun's Cat.*, No. 494.

In rich alluvial soil. Shore of Lake Erie. (*Goldie.*) This species has not been detected since the time of Goldie.

153. GYMNOCLADUS, Lam. (KENTUCKY COFFEE-TREE.)

(566.) **G. Canadensis**, Lam.

A number of very large trees of this species were found growing on the northern end of Pelee Island, in Lake Erie, in the summer of 1882. The settlers on the island say that there were many others when they began to clear off the timber. A few of the trees were over two feet in diameter. This species has been planted in the town of Niagara, where it has attained a large size, and seems to bear the winter without injury. Two large trees of this species are to be seen close to Rideau Hall, near Ottawa, where they must have stood for nearly half a century. (*Macoun.*)

154. CLEDITISCHIA, Linn. (HONEY LOCUST.)(567.) **C. triacanthos**, Linn. Three-thorned Acacia.

This species is common in cultivation throughout Ontario, and is quite hardy. In the summer of 1882 numerous trees of it were found growing on the sand dunes of Pelee Point. The seed had probably drifted across the lake from Ohio, as sand is not the true habitat of this tree.

XXXII. ROSACEÆ. ROSE FAMILY.

155. PRUNUS, Tourn. (PLUM. CHERRY.)(568.) **P. Americana**, Marshall. Wild Plum.*P. nigra*, Ait. Pursh, 331.*Cerasus nigra*, Loisel. Hook. Fl. I., 167.

Common in thickets from Montreal westward to Red River and the Assiniboine, about the 100° meridian.

Var. **mollis**, Torr. & Gray, Fl. I., 407.? *P. Canadensis*, Linn. Pursh, 330.*P. hiemalis*, Michx. Fl. I., 284.*P. mollis*, Torr., Fl. U.S., 470.*Cerasus hiemalis*, Seringe. Hook. Fl. I., 168.

La Grand Chaudière [Chaudière Falls, Ottawa]. (?) (*Pursh.*) This is the black-fruited variety of our wild plum, and is to be looked for throughout Ontario. It is probable we have two species in our territory.

(569.) **P. maritima**, Wang. Beach Plum.*P. sphaerocarpa*, Michx. Fl. I., 284.*P. pubescens*, Pursh, 331.

I introduce this species on the authority of L'Abbe Ovide Brunet, who quotes Pursh and the Hon. William Shepherd as his authorities. Borders of the Ottawa (?). (*Pursh.*) It may be looked for on the Island of Grand Manan and at St. Stephen, New Brunswick.

(570.) **P. pumila**, Linn. Sand, or Dwarf Cherry.*Cerasus pumila*, Michx. Hook. Fl. I., 167.*P. depressa*, Pursh, 332.*Cerasus depressa*, Seringe. Hook. Fl. I., 168.

Sand beaches and sand dunes and plains. St. John River, and along

On the
point
opposite

and is
found
probably
it at of

and the

This
ed for
r terri-

Brunet,
orities.
on the

On the large island which the C.P.R. crosses. Chaudière, the uppermost
point an old straggling bush. This is the only tree I have found of this
species at Ottawa. Since found at Rockcliff.

d along

t
I
(

in

V

(5

Se

co

its

ko

it

ku

can

(5

A

Cuc

the Restigouche, N.B. (*Fowler's Cat.*) Restigouche River, N.B., Isle of Orleans, and Lake Mistassini, Q. (*Brunet.*) River St. Lawrence at Montreal. (*Holmes.*) Beaches, Gaspé coast, and westward along the St. Lawrence and Great Lakes and on the prairies to about the 106th meridian.

(571.) **P. Pennsylvanica**, Linn. Bird Cherry.

P. borealis, Poir. Pursh, 538.

Cerasus borealis, Michx. Fl. I., 286.

C. Pennsylvanica, Seringe. Hook. Fl. I., 168.

From Newfoundland, Nova Scotia, New Brunswick, and westward to the Rocky Mountains, where it is a small bush. Hence through northern British Columbia to the Coast Range.

(572.) **P. emarginata**, Walp.

Cerasus emarginata, Dougl. Hook. Fl. I., 169.

Southern British Columbia near the coast, also on Vancouver Island in the vicinity of Victoria.

Var. **mollis**, Brewer. Bot. Cal. I., 167.

Cerasus mollis, Dougl. Hook. Fl. I., 169.

Prunus mollis, Walp. Macoun's Cat., No. 501.

On subalpine hills, near the source of the Columbia. (*Douglas.*) Victoria, Vancouver Island, and at Yale, B.C. (*Macoun.*)

(573.) **P. Virginiana**, Linn. Choke Cherry.

P. serotina, Poir. Pursh. 330.

Cerasus Virginiana, Loisel. Pl. Bourgeau, 256.

Cerasus serotina, Hook. Fl. I., 169.

Very abundant in thickets, extending from Newfoundland, Nova Scotia and New Brunswick across the entire continent. On the Pacific coast, it seems to merge into the next species, which at any rate takes its place on the coast. It is found as far north as Lat. 62° on the Mackenzie. On the southern prairie amongst sand and along river banks, it produces fruit which vies in sweetness with the far-famed "Saskatoon" berries of the Plain Indians. The prairie form should be carefully compared with the eastern one.

(574.) **P. demissa**, Walp.

Cerasus serotina, Hook. Fl. I., 169, in part.

Cerasus demissa, Nutt. Torr. & Gray, Fl. I., 411.

Along the coast of British Columbia, and in the interior as far as Cache Creek.

It is extremely probable that three species are included in the two mentioned above, and that the prairie form is a species intermediate between *P. Virginiana* and *P. demissa*.

(575.) ***P. serotina*, Ehrh.** Black Cherry.

P. Virginiana, Mill. Pursh, 329.

Cerasus Virginiana, Michx. Hook. Fl. I., 169.

Cerasus serotina, Loisel. Torr. & Gray, Fl. I., 410.

Rich woods and fence corners. Growing into a very large tree in western Ontario, where it attains its greatest dimensions, overtopping other trees of the forest. North-west Arm, Halifax, N.S. (*Lawson*.) Ox Bow, Salmon River, N.B., rare. (*Fowler's Cat*.) Eastern Townships, Q. (*Brunet*.) Abundant throughout Ontario, and as far west as the Kaministiquia River, Lake Superior. (*Macoun*.)

156. NUTTALLIA, Torr. & Gray. (OSO BERRY.)

(576.) ***N. cerasiformis*, Torr. & Gray.**

Vicinity of Victoria, Vancouver Island, and up the Fraser as far as Yale, B.C. (*Macoun*.)

157. SPIRÆA, Linn. (MEADOW-SWEET.)

(577.) ***S. salicifolia*, Linn.** Common Meadow-Sweet.)

S. hypericifolia, Marsh. Pursh, 341.

S. hypericifolia, var. *Plunkenetia*, Hook. Fl. I., 171.

Low damp places, generally near ponds and margins of streams, from Newfoundland, Nova Scotia, New Brunswick and westward to the base of the Rocky Mountains. Point Barrow to Mackenzie River on Arctic Sea. (*Pullen*.) The leaves of this species assume a multiplicity of forms.

(578.) ***S. tomentosa*, Linn.** Hardhack. Steeple Bush.

Low rich grounds. Common in Nova Scotia. (*McKay*.) Rather scarce in New Brunswick. (*Fowler's Cat*.) Not rare in Quebec and extending in Ontario through the northern counties to Muskoka. (*Burgess*.)

(579.) ***S. betulifolia*, Pallas.** Birch-leaved Spiræa.

S. chamaedrifolia, var. *media*, Pursh, 342. Hook. Fl. I., 171.

S. corymbosa, Raf. Gray, Manual, 149.

S. chamaedrifolia, var. β , Hook. Fl. I., 171.

Abundant in thickets on the Cypress Hills and in the Bow River

he two
mediate

tree in
opping
(*awson.*)
Town-
west as

7.)

far as

streams,
l to the
river on
iplicity

Rather
bec and
uskoka.

w River

P
B
C
in
S
(5

Ra

Jo
(58

unc
Va
tor
(58

M
Wo
lott
Mo
(58

H
sour
Sitk

(584

Ri
Isle
dant

Pass. Common in northern British Columbia. (*Macoun.*) West Butte and S. Kootanie Pass, near the 49th parallel; and Iroquois Creek, near Pine Pass, Rocky Mountains. (*Dawson.*) Sledge Island, in Behring's Straits. (*Menzies.*) Chamisso's Island in Kotzebue Sound; also on the mainland. (*Rothr. Alask.*)

(580.) **S. Douglasii**, Hook. Fl. I., 172.

North-west coast of America, Straits of De Fuca. (*Douglas.*) Coast Range about the head of Salmon River, B.C. (*Dawson.*)

Var. **Menziesii**, Presl.

S. Menziesii, Hook. Fl. I., 173. Macoun's Cat., No. 509.

North-west coast of America. (*Menzies.*) Coast of the Pacific in Johnston's Strait, B.C. (*Dawson.*)

(581.) **S. discolor**, Pursh, 342, var. **ariaefolia**, Watson.

S. ariaefolia, Smith. Hook. Fl. I., 173. Macoun's Cat., No. 510.

Frequent along the west coast, Lat. 40°-49°, forming part of the underwood of the forests. (*Douglas.*) Common around Victoria, Vancouver Island. (*Macoun.*) Along the coast northward from Victoria. (*Dawson.*)

(582.) **S. Aruncus**, Linn. Goat's Beard.

Moist woods near the source of the Columbia, B.C. (*Drummond.*) Woods near McLeod's Lake, B.C., Lat. 55°. (*Macoun.*) Queen Charlotte Islands; Coast Range; and Misinchinea River, B.C. (*Dawson.*) Mountains of Cariboo, B.C. (*Cowley.*)

(583.) **S. pectinata**, Torr. & Gray.

Saxifraga pectinata, Pursh, 312.

Eriogynia pectinata, Hook. Fl. I., 255.

Height of land upon the Rocky Mountains on the west side, near the sources of the Columbia. (*Drummond.*) Behring's Straits. (*Menzies.*) Sitka and about Behring's Straits. (*Rothr. Alask.*)

158. NEILLIA, Don. (NINE BARK.)

(584.) **N. opulifolia**, Benth. & Hook.

Spiraea opulifolia, Linn. Hook. Fl. I., 171. Macoun's Cat., No. 512.

River banks and gravelly shores of lakes. Near Quebec. (*Brunet.*) Isle of Orleans, Q. (*Thomas.*) Island of Montreal. (*Holmes.*) Abundant along the St. Lawrence and Great Lakes and westward to 30

miles up the Kaministiquia, Lake Superior. Also Rainy River and Lake of the Woods. (*Macoun.*) On the Saskatchewan (?). (*Richardson.*)

Var. **mollis**, Brew. & Wat. Bot. Cal. I., 171.

Spiraea capitata, Pursh, 342.

L. opulifolia, var. *mollis*, Hook. Fl. I., 171.

Along the Upper Columbia, B.C. (*Douglas.*)

159. GILLENIA, Mœnch. (INDIAN PHYSIC.)

(585.) **G. trifoliata**, Mœnch.

Spiraea trifoliata, Linn. Michx. Fl. I., 294.

Rich woods; only found on Prince's Island, near Hamilton. (*Logie.*) Canada. (*Pursh.*)

160. RUBUS, Tourn. (BRAMBLE.)

(586.) **R. odoratus**, Linn. Purple Flowering Raspberry.

Rocky and other thickets and fence corners. Cultivated in Nova Scotia, possibly a few plants wild. (*Lawson.*) From Rivière du Loup (*Thomas*) westward throughout Ontario to Goulais Point, Lake Superior. (*R. Bell.*)

(587.) **R. Nutkanus**, Moçino. White Flowering Raspberry.

Rocky thickets, from the Sault Ste. Marie, along the north shore of Lake Superior and westward to Lake Shebandowan, Dawson Route; St. John's Peace River and westward to the Pacific and Vancouver Island. Found throughout British Columbia, and on the eastern side of the Rocky Mountains. (*Macoun.*) S. Kootanie Pass on the 40th parallel, and Queen Charlotte Islands. (*Dawson.*) Sitka. (*Bischoff.*)

(588.) **R. Chamæmorus**, Linn. Cloud Berry.

Specially abundant in the north, and when found at its southern limit, always in cold peat bogs. Abundant in Nova Scotia, Cape Breton, Newfoundland, Labrador, and westward in the forest country, north of Lat. 54° to the Pacific. Northward to the Arctic Sea. Peat bogs, N.B., rather rare. (*Fowler's Cat.*) Common in peat bogs, along the Gaspé coast and at Rivière du Loup. (*Thomas.*) Peat bog at the base of the Porcupine Mountain, Man., Lat. 53°. (*Macoun.*) Greenland. (*Hook. Arct. Pl.*)

ver and
ardson.)

(Logie.)

n Nova
lu Loup
ake Su-

y.

shore of
Route;
ncouver
ern side
he 40th
Bischoff.)

southern
ia, Cape
country,
a. Peat
gs, along
g at the
conland.

590. *Enchiridion* Sp. m.

(58

L
(B
Shi
Lal
Ma
Riv
Kn
Kot
V

In
kate
Fron
52°-
This
the l
(590.

Pic
In dr
of Qu
grove
(J. B
(Toda
(591.)

Non
(Dow
Mount
near L
Hope
(Roth
(592.)

In m

(589.) **R. arcticus**, Linn. Arctic Raspberry.

Peat bogs and northern spruce woods. Labrador and Anticosti. (*Brunet.*) Newfoundland. (*Torrey & Gray.*) Top of Mount Albert, Shickshock Mountains, Gaspé, Q. Peat bog, north-west angle of the Lake of the Woods, wet woods and swamps, Porcupine Mountain, Man., Lat. 53°, and occasionally through the forest region to Peace River, and Northern British Columbia. (*Macoun.*) Oxford House to Knee Lake; Churchill River and east coast of Hudson's Bay. (*R. Bell.*) Kotzebue Sound and Bay of Good Hope. (*Chamisso.*)

Var. **grandiflorus**, Ledeb.

R. acutis, Michx. Hook. Fl. I., 182.

R. pistillatus, Smith. Richards. Frankl. Journ., II.

R. propinquus, Richards. Frankl. Journ., 2nd Ed., 19.

In sphagnous swamps, Hudson's Bay. (*Michaux.*) From the Saskatchewan, in Lat. 53°, to Fort Franklin, in Lat. 66°. (*Richardson.*) From Labrador to the woods and swamps of the Rocky Mountains, Lat. 52°-56°. (*Drummond.*) Northern British Columbia (*Macoun & Dawson*) This and the normal form are often confounded, but the zigzag stem of the latter and the large flowers of the former easily distinguish them.

(590.) **R. Dalibarda**, Linn.

Dalibarda repens, Linn. Hook. Fl. I., 184. Macoun's Cat., No. 564.

D. violacoides, Michx. Fl. I., 299.

Pictou, N.S., and along the Bay of Fundy, not common. (*McKay.*) In dry, mossy woods, N.B. (*Fowler's Cat.*) Common in many parts of Quebec. (*Brunet.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Millgrove marsh, near Hamilton, Ont. (*Logie.*) Gore Bay, Lake Huron. (*J. Bell.*) Elliott's Falls, Peterboro Co., Ont. (*Macoun.*) Lake Huron. (*Todd.*) Chatham, Ont. (*McGill Coll. Herb.*)

(591.) **R. pedatus**, Smith. Creeping Raspberry.

Northwest coast, as far north as Observatory Inlet, Lat. 55°. (*Douglas.*) In shady woods, at the roots of rotten trees, on the Rocky Mountains, Lat. 52°-56°. (*Drummond.*) Creeping amongst rotten wood near Macleod's Lake, B.C. (*Macoun.*) On the mountains above Fort Hope and on the coast range near Bute Inlet, B.C. (*Dawson.*) Sitka. (*Rothr. Alask.*)

(592.) **R. triflorus**, Richards. Dew Berry.

R. saxatilis, var. *Canadensis*, Michx. Fl. I., 298.

R. mucronatus, Seringe. Hook. Fl. I., 182.

In mossy woods or cedar swamps, from the Atlantic to the Pacific,

but not extending very far to the north, though common at York Factory, Hudson's Bay. Coast of Labrador. (*McGill Coll. Herb.*)

(593.) **R. stellatus**, Smith.

Near Foggy Harbor on the north-west coast of America. (*Menzies.*) This is an obscure and little-known species.

(594.) **R. strigosus**, Michx. Red Raspberry.

R. Idæus, Pursh, 346.

R. Idæus, var. *Canadensis*, Richards. Frankl. Journ., 11.

Coast of Labrador. (*McGill Coll. Herb.*) Very abundant from Nova Scotia to the Coast Range in British Columbia. In woods, after being burnt over, this species produces enormously, and might be made a source of profit to the settlers in the lumbering districts.

(595.) **R. neglectus**, Peck.

R. intermedia, Macoun's Cat., No. 579.

Thickets and fence corners, clearly a hybrid between the preceding and the next. One mile below Shannonville station, and not uncommon around Belleville and in the counties of Hastings and Northumberland. Also near Amherstburg, Ont. (*Macoun.*)

(596.) **R. occidentalis**, Linn. Black Raspberry.

Rich moist woods and on old stumps of trees in cultivated fields. Very common throughout Ontario. Scarcer in the Province of Quebec, extending eastward to below Quebec City. (*Brunet.*) Keswick Ridge, also said to occur in Westmoreland County, N.B. (*Hay.*)

(597.) **R. spectabilis**, Pursh.

Along the coast of British Columbia, west of the Coast Range. Vancouver and Queen Charlotte Islands. (*Macoun & Dawson.*) Sitka, Kodiak, and Cape St. Elias. (*Rothr. Alask.*)

(598.) **R. leucodermis**, Dougl.

R. occidentalis, var. β , Hook. Fl. I., 178.

North-west coast of America, and near the sources of the Columbia. (*Douglas.*) Along the Fraser River above Boston Bar, B.C. (*Macoun*)

(599.) **R. ursinus**, Cham. & Schlecht.

R. vitifolius, Torr. & Gray, Fl. I., 450.

R. macropetalus, Dougl. Hook. Fl. I., 178. Macoun's Cat., No. 573.

Banks of rivers and low woods, in the valley of the Columbia. (*Douglas.*) Vancouver Island near Victoria. (*Macoun.*) Coast Range and Queen Charlotte Islands. (*Dawson.*)

ork Fac-

Menzies.)

om Nova
er being
made a

receding
common
berland.

ed fields.
f Quebec,
k Ridge,

ge. Van-
) Sitka,

Columbia.
(Macoun)

o. 573.

Columbia.
ast Range

Abundant at Victoria, B. C.

Patterson Creek

Wentworth Road, White
Race House, 1112 S. 1st St. - Jackson - 1911

Box. Frank S. Ford Race course.

(6)

Pa

Al

Ca

La

J

Ra

Be

(60

T

mot

com

que

(602

T

(Me

Cat.

(Fl

Beav

Add

and

Sarn

Va

Ab

the e

tic sp

(600.) **R. villosus**, Ait. Thimble Berry.

Common in sandy woods and old clearings from Nova Scotia to Loon Portage on the Dawson Route, west of Lake Superior. (*Macoun.*)

Var. **frondosus**, Torrey.

R. inermis, Willd. Pursh, 348.

R. suberectus, Hook. Fl. L., 179.

Newfoundland. (*Cormack.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Abundant along the Grand Trunk Railway at Shannonville and at the Carrying Place, head of the Bay of Quinte, Ont. (*Macoun.*) Between Lake Superior and Lake Winnipeg. (*Richardson.*)

Var. **humifusus**, Torr. & Gray.

Pictou, N.S. (*McKay.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Railway track at Niagara Falls. (*Macoun.*) Near London, Ont. (*Burgess.*)

(601.) **R. Canadensis**, Linn.

R. flagellaris, Willd. Pursh, 347.

R. trivialis, Pursh. Hook. Fl. L., 180.

Thickets and rocky hills. Newfoundland. (*Morrison.*) Rather common in Nova Scotia. (*McKay.*) Rocky places and thickets, N.B., common. (*Fowler's Cat.*) Not uncommon in Quebec. (*Brunet.*) Frequent in Ontario, extending to Lake Superior. (*Macoun.*)

(602.) **R. hispidus**, Linn. Swamp Blackberry.

R. obovalis, Michx. Fl. L., 298.

R. obovatus, Ell. Hook. Fl. L., 180.

Trailing amongst grass in swampy ground. Pictou and Halifax, N.S. (*McKay.*) Fredericton and other localities, N.B., rather rare. (*Fowler's Cat.*) Near Montreal (*McGill Coll. Herb.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Woods north of Prescott Junction. (*Billings.*) Beaver meadows and marshy flats throughout the northern portions of Addington, Hastings and Peterboro Counties, Ont. (*Macoun.*) Nicolet and Niagara, Ont. (*Maclean.*) Common in swamps at London and Sarnia, Ont. (*Burgess.*)

Var. **setosus**, Torr. & Gray.

R. setosus, Bigel. Hook. Fl. L., 179.

About Montreal. (*Vide Hooker, p. 180.*) The var. is most probably the eastern form of the species and ought to be compared with authentic specimens.

(603.) **R. nivalis**, Dougl. Hook. Fl. I., 181.

On the high snowy ridges of the Rocky Mountains. (*Douglas*.) This is an obscure species and should be looked for about the sources of the Columbia.

161. PURSHIA, DC. ("CHAPPARAL.")

(604.) **P. tridentata**, DC.

Tigarea tridentata, Pursh, 333.

Osoyoos Lake, southern boundary of British Columbia. (*Dawson*.)

162. DRYAS, Linn. (DRYAS.)

(605.) **D. octopetala**, Linn.

Rocky Mountains, Lat. 52°-56°, sometimes with double flowers. (*Drummond*.) On the top of Stuart Lake Mountain, B. C., and on Mount Selwyn, Peace River Pass, Lat. 56°. (*Macoun*.) Coast Range, near Bute Inlet, B. C., and on the Rocky Mountains, S. Kootanie Pass. (*Dawson*.) Kotzebue Sound to Port Clarence and northern shore. (*Rothr. Alask.*) Cape Lisburne, in Behring's Straits. (*Beechey*.) Shores and islands of the Arctic Sea. (*Franklin*.) Greenland. (*Hook. Arct. Pl.*)

Var. **integrifolia**, Cham. & Schlecht.

D. integrifolia, Vahl. Hook. Fl. I., 174. Macoun's Cat., No. 522.

D. tenella, Pursh, 350.

Island of Anticosti. (*Goldie*.) Labrador. (*Butler*.) Churchill River and east coast of Hudson's Bay. (*R. Bell*.) In dry and rocky places from Lat. 54° to the islands of the Arctic Sea, where it is abundant. (*Richardson*.) Extending westward to Behring's Straits. (*Chamisso*.) Rocky Mountains, Lat. 52°-56°, especially on the more elevated ridges. (*Drummond*.) Top of Mount Selwyn, Peace River Pass. (*Macoun*.)

(606.) **D. Drummondii**, Hook.

On gravelly beaches and bars of rivers. Dartmouth, and Ste. Anne des Monts, Rivers, Gaspé, Q. Gravel bars in the Bow River at and above Morley; Peace River, within the Rocky Mountains, and west to the Blackwater River, B.C. (*Macoun*.) Island of Anticosti. (*Pursh*.) Slate Islands, Lake Superior. (*Prof. Ellis*.) In the woody country, Lat. 54°-64°, and about Slave and Bear Lakes, as far as the mouth of Bear Lake River, and thence to the shores of the Arctic Sea. (*Richardson*.) Gravelly battures of alpine rivers, Lat. 52°-56°. (*Drummond*.) Rocky Mountains, Kootanie Pass. (*Dawson*.)

) This
s of the

wson.)

flowers.
and on
Range,
ie Pass.
a shore.
Shores
rect. Pl.)

2.

ill River
y places
undant.
namisso.)
l ridges.
coun.)

e. Anne
r at and
l west to
(Pursh.)
country,
mouth of
Richard-
immond.)

Andean Canal.

(6

W

Qu

Va

(M

Ow

(60

I

(J.

Bel

(M

Ont

(609

C

N.S.

son's

Rivie

(Mc

Pic 1

Lake

Char

(610.

Fro

Colum

the ea

(611.)

Ope

(612.)

Aro

and No

163. **CEUM**, Linn. (AVENS.)

- (607.)
- C. album**
- , Gmelin.

G. Virginianum, Murr. Hook. Fl. I., 176.

Borders of damp or rich woods. Windsor and Truro, N.S. (*Howe*.) Woodstock, rare; Keswick Ridge, N.B. (*Fowler's Cat.*) Vicinity of Quebec; Charleburg. (*Brunet.*) Rivière du Loup, Q. (*Thomas.*) Valley of the Rouge, Q. (*D'Urban.*) Very abundant in western Quebec. (*McGill Coll. Herb.*) Plentiful throughout Ontario from the east to Owen Sound. (*Macoun.*)

- (608.)
- C. Virginianum**
- , Linn.

Borders of fields in rich soil, rare. Hampton and Petiteodiac, N.B. (*J. Brittain.*) Along the Grand Trunk Railway, three miles east of Belleville, Ont.; also Township of Brighton, Northumberland Co., Ont. (*Macoun.*) Chippawa and Malden, Ont. (*MacLagan.*) Near London, Ont. (*Burgess.*)

- (609.)
- C. macrophyllum**
- , Willd.

G. strictum, var. β , Hook. Fl. I., 175.

Cold, rocky or mountain woods. Truro, Middleton and Guysboro', N.S. (*Dawson & Ball.*) Bathurst, N.B. (*McGill Coll. Herb.*) Hudson's Brook, Kent Co., also St. John, N.B., not common. (*Fowler's Cat.*) Rivière du Loup, Q. (*Thomas.*) Knowlton, Eastern Townships, Q. (*McGill Coll. Herb.*) North-east shore of Lake Superior, between the Pic River and Otter Head; American Portage, Dawson Route, west of Lake Superior. (*Macoun.*) Coast Range near Bute Inlet; and Queen Charlotte Islands. (*Dawson.*) Sitka and Unalashka. (*Rothr. Alaska.*)

- (610.)
- C. strictum**
- , Ait.

G. Canadense, Murr. Michx. Fl. I., 300.

From Newfoundland and Nova Scotia to the Coast Range in British Columbia. A very common species in thickets and fence corners in the east, and on the borders of ravines and low prairies in the west.

- (611.)
- C. vernum**
- , Torr. & Gray.

Open, damp woods, Amherstburg, on Lake Erie. (*Macoun.*)

- (612.)
- C. rivale**
- , Linn. Purple Avens.

Around springs and in boggy places. Common from Nova Scotia and Newfoundland to the Coast Range, B.C.

(613.) **C. triflorum**, Pursh.*C. ciliatum*, Pursh, 352.*C. pubescens*, Hook. Fl. I., 175.*Sieversia triflora*, R. Br. Hook. Fl. I., 176.

Rocky ground, on dry ridges. Labrador. (*Morrison*.) Newfoundland. (*Cormack*.) Limestone rocks, east of Trenton Station, on the Grand Trunk Railway; also, on the same line in a rock cutting, east of Shannonville Station, Ont. (*Macoun*.) Vicinity of London. (*Burgess*.) Galt, Ont. (*Buchan*.) Abundant on the western prairies, and extending to Peace River and through the Rocky Mountains to British Columbia. (*Macoun*.) Lake Athabasca. (*Richardson*.)

(614.) **C. calthifolium**, Menzies.*C. radiatum*, Pursh, 352, not Michaux.*Sieversia dilatata*, R. Br., in Parry's 1st Voy. 276.*S. radiata*, Hook. Fl. I., 177, not R. Br.

North-west coast of America. (*Menzies*.) Ounalashka and Sitka. (*Rothr. Alask.*)

(615.) **C. glaciale**, Fisch.*Sieversia glacialis*, R. Br. Hook. Fl. I., 176.

Shores of the Arctic Sea, west of the Mackenzie River. (*Franklin*.) Cape Lisburne, in Behring's Straits. (*Beechy*.) Kotzebue Sound. (*Rothr. Alask.*)

(616.) **C. Rossii**, Seringe.*Sieversia Rossii*, R. Br. Hook. Fl. I., 176.

Melville Island. (*Parry*.) Ounalashka. (*Rothr. Alask.*) Bay of St. Lawrence. (*Chamisso*.) Islands north of Lancaster Sound and Greenland. (*Hook. Arct. Pl.*)

Var. **humile**, Torr. & Gray.

Sieversia humilis, R. Br. Hook. Fl. I., 176.

Ounalashka. (*Chamisso*.)

164. WALDSTEINIA, Willd. (BARREN STRAWBERRY.)(617.) **W. fragarioides**, Tratt.*Dalibarda fragarioides*, Michx. Fl. I., 300.*Comaropis fragarioides*, Nestler. Hook. Fl. I., 177.

Wooded hillsides, quite common in Ontario, from Ottawa to Cockburn Island, in Lake Huron. Generally on dry, sandy soil.

ewfound
on the
ing, east
Burgess
and ex
British

nd Sifle

Franklin
e Sound.

Bay of
ound and

BERRY.)

t to Cook-

(
(
ti
(
of
ev
(6
so
se
for
(6
and
str
(

165. SIBBALDIA, Linn. (SIBBALDIA.)**(618.) S. procumbens, Linn.***Potentilla procumbens*, DeClairv. Macoun's Cat., No. 541.

Coast of Labrador. (*McGill Coll. Herb.*) On the top of Mount Albert, Shickshock Mountains, Gaspé, Q. (*Macoun.*) Mountain top, S. Kootanie Pass; Coast Range, B. C. (*Dawson.*) Swamp Creek, northern British Columbia. (*Macoun.*) Prairies, and upon the heights of the Rocky Mountains, Lat. 52°-56°. (*Drummond.*) Ounalashka. (*Chamisso.*) Greenland. (*Hook. Arct. Pl.*)

166. CHAMÆRHODOS, Bunge.**(619.) C. erecta, Bunge.***Sibbaldia erecta*, Linn. Pursh, 211.

Dry, gravelly slopes and hillsides throughout the prairie region. (*Macoun.*) About Carlton, on the Saskatchewan. (*Richardson.*) Among the Rocky Mountains, Lat. 52°-56°. (*Drummond.*)

167. FRACARIA, Tourn. (STRAWBERRY.)**(620.) F. Virginiana, Duchesne. Wild Strawberry.***F. Canadensis*, Michx. Hook. Fl. I., 185.

Abundant from Newfoundland and Nova Scotia to the Coast Range of British Columbia, and north to Lat. 64°. It bears fruit abundantly everywhere, but more particularly on newly cleared lands.

(621.) F. vesca, Linn. Wood Strawberry.

This is a forest species, fruiting abundantly in grassy woods. Not so common as the other, but having the same range to the west. It seems to be confined to a more southern latitude, as it has not been found north of Lat. 56° on Peace River.

(622.) F. Chilensis, Duchesne.

Common along the shores of British Columbia and Vancouver Island and extending north to "Point Bodugo". (*Scouler.*) This is the strawberry found west of the Coast Range.

Var. **Scouleri**, Hook. Fl. I., 185.

F. Chilensis, var. β & γ in part, Torr. & Gray, Fl. I., 448.
Queen Charlotte Islands. (*Dawson.*)

168. POTENTILLA, Linn. (CINQUE-FOIL. FIVE-FINGER.)**(623.) P. arguta, Pursh.**

Dry rocky thickets and open prairies. Keswick Ridge, N.B. (*Moser.*) Devil's Rapids, River Rouge, Q. (*D'Urban.*) From the vicinity of Ottawa this species is more or less abundant to northern British Columbia on the Nahcoco River. (*Macoun.*) In the Nicola Valley, B.C. (*Dawson.*) Woody country as far north as Lat. 65°. (*Richardson.*)

(624.) P. glandulosa, Lindl.

P. arguta, Lohm. Hook. Fl. I., 186, in part.

P. fissu, Nutt. Torr. & Gray, Fl. I., 446.

Rocky Mountains in the S. Kootanie Pass, and along the southern border of British Columbia. (*Dawson.*)

(625.) P. Norvegica, Linn.

Very abundant in cultivated grounds, river bottoms and on lake shores. From Nova Scotia to the Rocky Mountains, and as far north as Bear Lake. (*Richardson.*) Hudson's Bay. (*R. Bell.*) Labrador coast. (*Butler.*) Sitka and Point Barrow to the Mackenzie River. (*Rothr. Alaska.*)

Var. hirsuta, Torr. & Gray.

P. hirsuta, Michx. Hook. Fl. I., 193.

From Quebec to the Gulf of St. Lawrence. (*Michaux.*) Plains of the Saskatchewan. (*Richardson.*) Lake Mistassini. (*J. Richardson.*) Borders of ponds and lakes, prairie region; and doubtless frequent in Ontario. (*Macoun.*)

(626.) P. rivalis, Nutt., var. millegrana, Watson.

P. millegrana, Engelm. Macoun's Cat., No. 535.

Borders of ponds and lakelets in the south-western part of the prairie region. Rather common. (*Macoun.*)

(627.) P. supina, Linn.

P. paradoxa, Nutt. Torr. & Gray, Fl. I., 437.

Borders of lakes and ponds. Burlington Beach, Hamilton, Ont. (*Buchan.*) Shores of Toronto Island and westward up the lake shores to Amherstburg, Ont. Abundant on the shores of Long Lake, Old Wives' Lakes, Gull Lake, and many others in the prairie region. (*Macoun.*)

(628.) P. Pennsylvanica, Linn.

Dry, gravelly soil. North shore of St. Lawrence, Murray Bay.

signa . Britannia, vol. 1

NGER.)

(Moser.)
inity of
British
Valley,
hardson.)

southern

on lake
ar north
Labrador
e River.

Plains of
hardson.)
quent in

the prairie

on, Ont.
co shores
lake, Old
region.

ay Bay.

C

(

E

(

th

(A

(C

Re

ex

Cr

C

Lat

(*McGill Coll. Herb.*) St. Croix; Rivière du Loup, Q. (*Prunet.*) St. Roche des Autruts, Q. (*Maclean.*) Lake Superior. (*Prof. Ellis.*) On gravel beaches, both above and below Mont Louis, Gaspé coast, Q. Very abundant on the western plains and through the Rocky Mountains to Spence's Bridge, in British Columbia. (*Macoun.*) As far north as Bear Lake, and from Hudson's Bay to the Rocky Mountains. (*Richardson.*) Churchill River and near York Factory. (*R. Bell.*) Kotzebue Sound. (*Rothr. Alask.*)

Var. **strigosa**, Pursh, 356.

Abundant on the western plains and near Cache Creek, in British Columbia. The common form in the prairie region. (*Macoun.*)

Var. **bipinnatifida**, Torr. & Gray.

P. bipinnatifida, Dougl. Hook. Fl. I., 188.

Plains of the Saskatchewan and Red Rivers. (*Douglas.*) Vicinity of Old Wives' Lakes, N.W.T., and westward. (*Macoun.*)

Var. **glabrata**, Watson.

P. sericea, var. *glabrata*, Hook. Fl. I., 189.

Rocky Mountains, Lat. 52°-56°. (*Drummond.*)

(629.) **P. Hookeriana**, Lehm.

Collected on the Saskatchewan; locality not stated. (*Bourgeau.*) British America. (*Watson.*) We have never met with this species.

(630.) **P. pulchella**, R.Br.

Islands of the Arctic Sea. (*Ross.*) Shores of the mainland between the Coppermine and Mackenzie Rivers. (*Richardson.*) Greenland. (*Hook. Arct. Pl.*) Mackenzie River. (*McGill Coll. Herb.*)

(631.) **P. Hippiana**, Lehm.

P. pennsylvanica, var. *Hippiana*, Torr. & Gray, Fl. I., 438.

Plains of the Saskatchewan and Red Rivers and prairies of the Rocky Mountains. (*Drummond.*) Very abundant in the prairie region, extending to the Rocky Mountains and British Columbia, below Cache Creek. (*Macoun.*) Pine River, Lat. 55°. (*Dawson.*)

Var. **pulcherrima**, Watson.

P. pulcherrima, Hook. Fl. I., 190.

P. pennsylvanica, var. *pulcherrima*, Torr. & Gray, Fl. I., 438.

P. rubricaulis, Pl. Bourgeau, 256.

On the prairies as well as on dry banks, in the Rocky Mountains, Lat. 52°-56°. (*Drummond.*) Point Wilkins, Lake Winnipegosis, Man.

On limestone rocks near Stuart Lake, and at Cache Creek, B.C. (Macoun.)

(632.) **P. effusa**, Dougl.

On elevated grounds of the Assiniboine, and the higher parts of the Red River, plentiful. (Douglas.) Very common on the Souris Plain, but seems to merge into the preceding species farther to the west. (Macoun.)

(633.) **P. Plattensis**, Nutt.

P. sericea, var. β , Pl. Bourgeau, 256.

Very common from Cut Arm Creek, N.W.T., westward, and southward towards the 49th parallel on saline, marshy soils. (Macoun.) Saskatchewan Plains. (Bourgeau.)

(634.) **P. dissecta**, Pursh. Hook. Fl. I., 193.

P. diversifolia, Hook. Fl. I., 190. Macoun's Cat., No. 548.

P. Drummondii, Hook. Fl. I., 189. Macoun's Cat., No. 556.

P. rubricaulis, Hook. Fl. I., 191.

York Factory and Echimanish River. (R. Bell.) Near Hudson's Bay. (Pursh.) About Bear Lake, in Lat. 66°. (Richardson.) Alpine woods and prairies in the Rocky Mountains, as well as on the higher summits, Lat. 52°-56°. (Drummond.) Rocky Mountains in the S. Kootanie Pass, and on the Coast Range, B.C. (Dawson.) Great Slave Lake. (McGill Coll. Herb.)

(635.) **P. gracilis**, Dougl. Hook. Fl. I., 192.

P. nirea, var. Pl. Bourgeau, 256.

Common throughout the western prairies and extending into British Columbia.

Var. **flabelliformis**, Torr. & Gray.

P. flabelliformis, Hook. Fl. I., 192. Macoun's Cat., 549.

Plains of the Saskatchewan. (Drummond.) Abundant on the western prairies. (Macoun.)

Var. **fastigiata**, Watson.

P. fastigiata, Nutt. Torr. & Gray, Fl. I., 440.

Old Wives Lakes, N.W.T., and westward, rare. (Macoun.)

Var. **rigida**, Watson.

P. chrysantha, Hook. Fl. I., 193.

P. rigida, Nutt. Torr. & Gray, Fl. I., 440.

P. Nuttallii, Lehm. Macoun's Cat., No. 554.

Moist prairies near the Rocky Mountains. (Drummond.) In low

k, B.C.

s of the
s Plain,
e west.

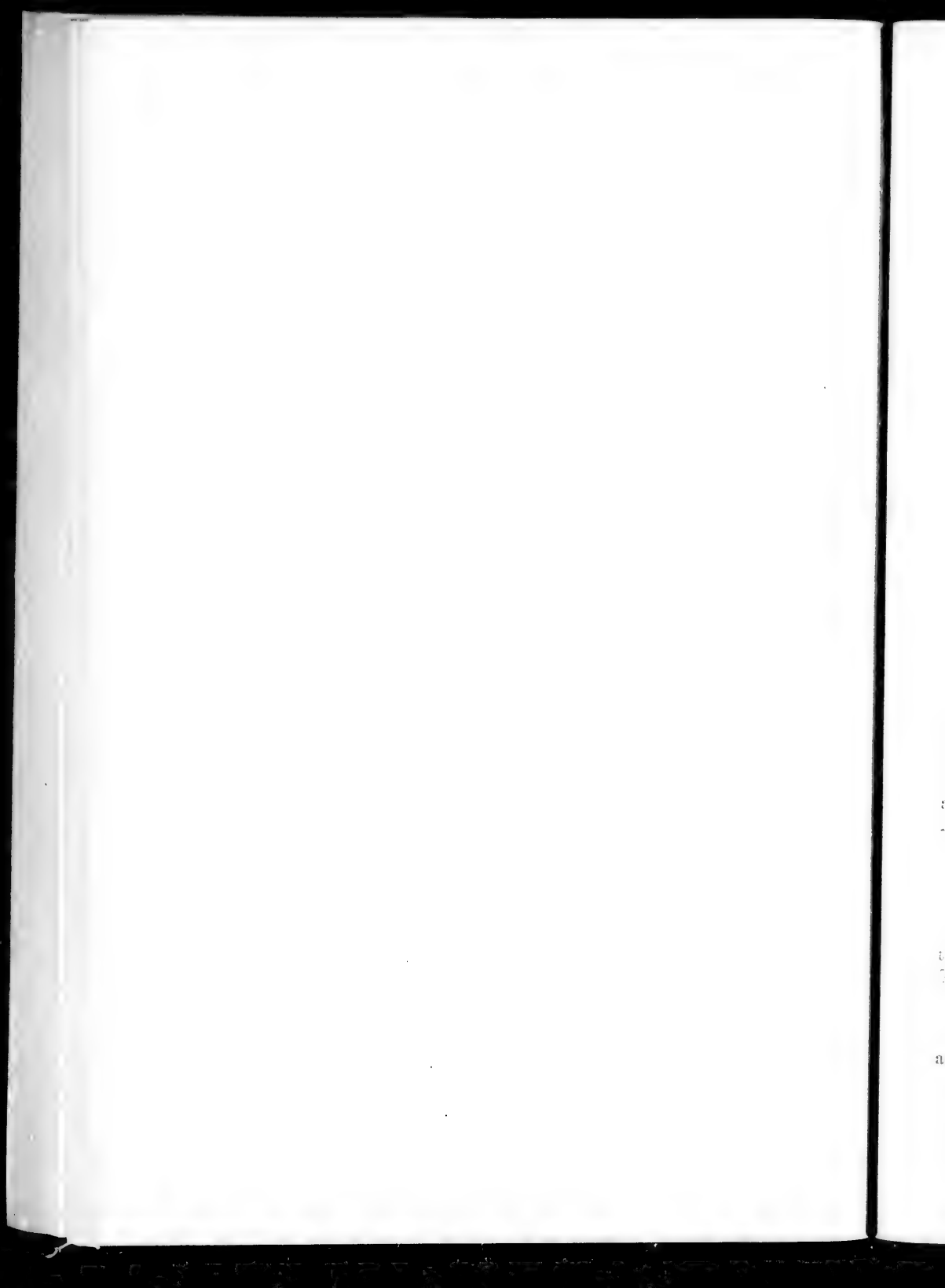
south-
(*Macoun.*)

ndson's
Alpine
higher
the S.
at Slave

British

on the

In low



ponds where water gathers in the spring, and near the margins of the
 bays and small depressions in the prairie. The commonest form of

P. plicata, Vahl.

On bank of the Canada Southern Railway, a little above the Clifton
 House, Niagara Falls. A fine clump of this species was found growing
 here in great luxuriance in July, 1882. Its tall rigid stems and light
 yellow flowers distinguish it from *P. gracilis*, its near ally. This species
 evidently came from southern Europe.

(637.) *P. argentea*, Linn. Silvery Cinque-foil.

Introduced into dry fields and pastures. In some localities probably
 indigenous. Halifax, Truro, Margareville, and Kentville, N.S. (*Mc-*
Kenz.) Norton, N.B. (*Forster's Cat.*) Rivière du Loup, Q. (*Thomas.*)
 Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Field, back of the Drill Shed,
 Kingston, Ont.; sandy fields, Picton, Ont.; near Colborne, Ont., in a
 field; and abundant on vacant lots near St. James' Cemetery, Toronto.
 (*Macoun.*) Dry fields near London, Ont. (*Burgess.*)

(638.) *P. humifusa*, Nutt.

P. concinna, Richards. Hook. Fl. I., 193. Macoun's Cat., No. 555.

Plains of the Saskatchewan about Carlton. (*Drummond.*) On the
 tops of gravel knolls or hills throughout the prairie region, but rare.
 (*Macoun.*)

(639.) *P. nivea*, Linn. Hook. Fl. I., 195.

Labrador. (*Hosker.*) Churchill River. (*R. Bell.*) Dry and ele-
 vated ridges of the Rocky Mountains, Lat. 52°-56°. (*Drummond.*)
 Mackenzie River. (*McGill Coll. Herb.*) Shores of the Arctic Sea.
 (*Richardson.*) Islands of the Arctic Sea. (*Parry.*) Kotzebue Sound,
 and coast west of Cape Bathurst. (*Rothr. Alask.*) Greenland. (*Hook.*
Arct. Pl.)

Var. *Vahliana*, Seem.

P. Vahliana, Hook. Fl. I., 194.

P. nivea, var. ; Torr. & Gray, Fl. I., 441.

Alpine prairies of the Rocky Mountains. (*Drummond.*) Shores of
 the Arctic Sea. (*Richardson.*) Islands of the Arctic Ocean. (*Parry.*)
 Greenland. (*Hook. Arct. Pl.*)

Var. *dissecta*, Watson.

Rocky Mountains at the head of Smoky River. (*Watson.*) This is
 a very variable species.

- (640.) **P. fragiformis**, Willd. Hook. Fl. I., 194.

In the Aleutian Islands. (*De Candolle.*) St. Paul's Island. (*Hur-
rington.*)

Var. **villosa**, Regel.

P. villosa, Pall. Hook. Fl. I., 194.

From Vancouver Island to Alaska. (*Watson.*) Queen Charlotte
Islands. (*Dawson.*) Kotzebue Sound, Oumalashka and Sitka. (*Rothr.
Alask.*) Dundas Island, B.C. (*Scouler.*)

- (641.) **P. maculata**, Pour.

P. Salisburgensis, Hænke. Torr. & Gray, Fl. I., 440.

P. opaca, Pursh, 355, not Linn. Hook. Fl. I., 191.

Labrador. (*McGill Coll. Herb.*) Greenland. (*Hook. Arct. Pl.*)

- (642.) **P. frigida**, Villars.

P. minima, Gray. Manual, 1st ed., 122.

Mackenzie River eastward to Baffin's Bay, and north to Melville and
other Arctic Islands; also Greenland. (*Hook. Arct. Pl.*)

- (643.) **P. emarginata**, Pursh. Hook. Fl. I., 194.

P. nana, Willd. Hook. Fl. I., 194.

P. Greenlandica, R.Br. in Ross's Voy., 142.

P. niva, var. *concolor*, Torr. & Gray, Fl. I., 441.

On the most elevated of the Rocky Mountains. (*Drummond.*) La-
brador. (*Kohlmeister.*) Kotzebue Sound, and between Point Barrow
and Mackenzie River. (*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*)

- (644.) **P. gelida**, C. A. Meyer.

P. flabellifolia, Hook. Torr. & Gray, Fl. I., 442.

Summit of the Cascade Range, near Hope, B.C. (*Dawson.*) Cascade
Mountains. (*Lyall.*)

- (645.) **P. palustris**, Scop. Marsh Five-Finger.

Comarum palustre, Linn. Pursh, 156.

Very common in marshes and bogs from Labrador and Nova Scotia
to the Pacific, and north to the Arctic Sea. Sitka and Island of St.
Lawrence. (*Rothr. Alask.*)

- (646.) **P. biflora**, Willd.

Barren grounds, from Lat. 64° to the shores of the Arctic Sea.
(*Richardson.*) Kotzebue Sound and Cape Lisburne. (*Rothr. Alask.*)

(Har-

Charlotte
Kothr.

l.)

le and

) La-
Barrow
et. Pl.)

ascade

Scotia
of St.

e Sea.
tsk.)

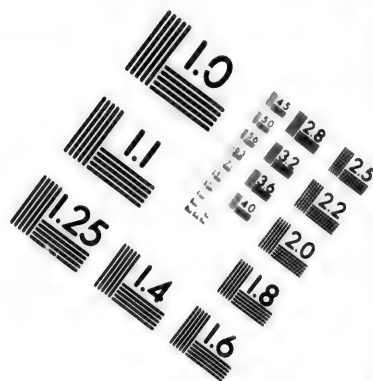
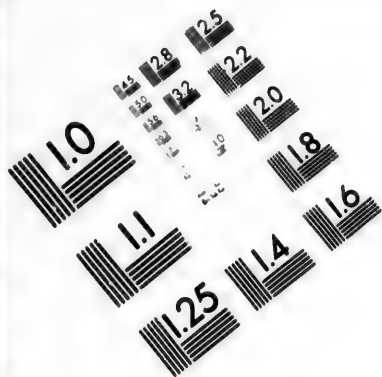
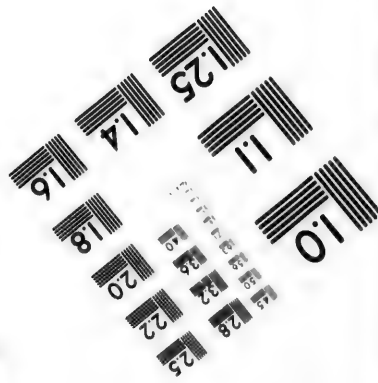
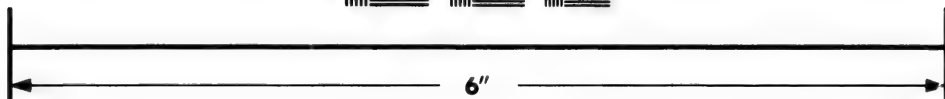
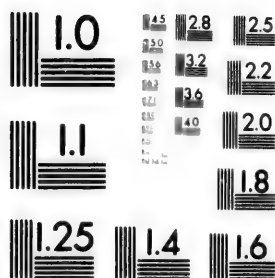


IMAGE EVALUATION TEST TARGET (MT-3)



Photographic Sciences Corporation

**23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503**



Lake du chien (Agnes)

C
P
V
S

po

(647.) **P. fruticosa**, Linn. Shrubby Cinque-foil.

Common on the rocky margins of rivers and lakes from Labrador and Newfoundland to the Pacific, and northward to the Arctic Sea. Besides being frequent in Eastern Canada at low altitudes, it becomes truly alpine in the Rocky Mountains and is found almost at the snow line. Greenland. (*Hook. Arct. Pl.*)

(648.) **P. tridentata**, Solander.

Labrador and Newfoundland, Nova Scotia and New Brunswick, Lower St. Lawrence, top of Belœil Mountain, at Three Rivers, north and south shores Lake Huron and Lake Superior, and westward through the wooded country to the Rocky Mountains in the Peace River Pass, and northward to Lat. 64°. It seems to thrive equally well on rocks or sand. (*Macoun.*) Greenland. (*Hook. Arct. Pl.*)

(649.) **P. Anserina**, Linn. Silver Weed.

Very abundant along the eastern coast and on the margins of all rivers and lakes throughout the interior and northward to the Arctic Sea. (*Macoun.*) Greenland. (*Hook. Arct. Pl.*)

Var. **grandis**, Lehm. *Hook. Fl. I.*, 189.

Vancouver Island and Queen Charlotte Islands, and doubtless along the coast of British Columbia. (*Macoun & Dawson*)

Var. **Greenlandica**, Tratt.

P. Anserina, var. *Egedii*, Torr. & Gray, *Fl. I.*, 444.

Whale Fish Islands. (*Parry.*)

(650.) **P. Canadensis**, Linn.

P. pumila, Poir. Pursh, 354.

Pictou and Halifax, N. S. (*McKay.*) Vicinity of Quebec; St. Hyacinthe, Q. (*Brunet.*) Abundant at Rivière du Loup, Q. (*Thomas.*) Vicinity of Montreal. (*McGill Coll. Herb.*) Very common on sandy soil both in fields and open woods throughout Ontario to Lake Huron.

Var. **simplex**, Torr. & Gray, *Fl. I.*, 443.

P. simplex, Michx. *Hook. Fl. I.*, 193.

Common in fields, N.B. (*Fowler's Cat.*) About Quebec City. (*Shepard.*) Abundant in damp woods at Amherstburg, Ont. (*Macoun.*)

- (651.) **P. nemoralis**, Nestler. Torr. & Gray, Fl. I., 444

P. Tormentilla, var. *nemoralis*, Seringe.

P. Tormentilla, Lawson.

Labrador. (*Hooker*, vide *Torr. & Gray*.) St. Ann's, Cape Breton. (*Lawson*.)

Watson, in his revision of *Potentilla*, doubts the occurrence of this species in America, but Dr. Lawson found it some years ago, as cited above.

169. **ALCHEMILLA**, Tourn. (LADIES' MANTLE.)

- (652.) **A. arvensis**, Scop. Parsley Pier.

A. Aphanes, Pursh, 112.

A. cuneifolia, Nutt. Torr. & Gray, Fl. I., 432.

A. occidentalis, Nutt. Macoun's Cat., No. 516.

Abundant on dry gravelly hills and along the coast, near Victoria, Vancouver Island. (*Macoun*.) Lueyfield, N.S. (*Lawson*.)

- (653.) **A. vulgaris**, Linn.

South coast of Labrador. (*Butler*.) Greenland. (*Hook. Arct. Fl.*)

170. **ACRIMONIA**, Tourn. (AGRIMONY.)

- (654.) **A. Eupatoria**, Linn. Common Agrimony.

A. pilosa, Pl. Bourgeau. 256. Macoun's Cat., No. 517.

Rich moist thickets or borders of woods. Abundant from Nova Scotia westward to near the Rocky Mountains.

Var. **parviflora**, Hook. Fl. I., 196.

A. striata, Michx. Fl. I., 287.

This seems to be a little-known form, and requires investigation. It should be looked for in western Ontario. (*Macoun*.) Lake Huron. (*Todd*.)

- (655.) **A. parviflora**, Ait.

A. Eupatoria, Michx. Fl. I., 287, chiefly.

A. suaveolens, Pursh, 336.

This species may be the form referred to by Hooker, and the above variety have no existence in Ontario. In woods near Amherstburg, Ont., 1882. (*Macoun*.) Malden, Ont. (*MacLagan*.)

Breton.

of this
as cited

Ξ.)

Victoria,

act. Fl.)

n Nova

tion. It
Huron.

he above
erstburg,

171. POTERIUM, Linn. (BURNET.)**(656.) P. Canadense, Benth. & Hook.***Sanguisorba Canadensis*, Linn. Hook. Fl. I., 198.*S. media*, Linn. Pursh, 116.

Newfoundland. (*J. Bell.*) St. Paul's, and Magdalen Islands, Gulf of St. Lawrence. (*McKay.*) Truro, N.S. (*McGill Coll. Herb.*) Very abundant from Port Daniel, along the Bay of Chaleur and the whole coast of Gaspé. (*Macoun.*) Cacouna, Q. (*Ellis.*) South coast of Labrador. (*Butler.*) Savanne, Q. (*Holmes.*) Northern British Columbia, near Macleod's Lake. (*Macoun.*) Coast Range, near Bute Inlet, and on the Misinehinea River, Pine Pass, Rocky Mountains. (*Dawson.*) Grassy pastures in the valleys of Ounalashka, Buckland River, Sitka, Fort Youcon and Youcon River banks. (*Rothr. Alask.*)

(657.) P. officinale, Benth. & Hook.*Sanguisorba officinalis*, Linn. Hook. Arct. Pl., 290.

Alaska. (*Kennicott.*) Arctic America, east of Mackenzie River. (*Hook. Arct. Pl.*)

(658.) P. Sitchense, Watson.*Sanguisorba media*, Hook. Fl. I., 197.*S. Canadensis*, var. *latifolia*, Hook. Fl. I., 198.

Observatory Inlet, North-west coast. (*Scouler.*) It is probable that all western localities of *P. Canadense* refer to this species. (*Macoun.*)

172. ROSA, Tourn. (ROSE.)**(659.) R. setigera, Michx. Fl. I., 295. Climbing Rose.**

Borders of thickets and along fences, at Amherstburg, Ont., and on Pelee Island, Lake Erie. (*Macoun.*) Malden, Ont. (*MacLagan*)

(660.) R. Carolina, Linn. Swamp Rose.*R. Pennsylvanica*, Michx. Fl. I., 296, in part.

Borders of swamps and damp thickets, from Nova Scotia and New Brunswick to the western part of Ontario.

(661.) R. lucida, Ehrh. Dwarf Wild Rose.

Newfoundland. (*Hook. Fl. I.*, 199.) Pictou, Cape Breton, and Magdalen Islands, N.S. (*McKay.*) Lucyfield, N.S. (*Lawson.*) Common

in New Brunswick. (*Fowler's Cat.*) Common in Quebec and Ontario, and west to Lake Huron.

(662.) **R. blanda**, Ait. Early Wild Rose.

R. Pennsylvanica, Michx. Fl. I., 296, in part.

R. Woodsii, Torr. & Gray, Fl. I., 460. Macoun's Cat., 584.

? *R. laevigata*, Borrer. Hook. Fl. I., 200.

Thickets and old fields, very common, from Quebec westward to British Columbia. On the western prairies and in British Columbia this species is not well defined and requires more investigation. (*Macoun.*) Pietou and Magdalen Islands, N.S. (*McGill Coll. Herb.*)

Var. **setigera**, Crépin.

R. Woodsii, var., Hook. Fl. I., 199. Macoun's Cat., No. 584.

R. stricta, var. β . Torr. & Gray, Fl. I., 461.

R. stricta, Macoun & Gibson. Macoun's Cat., 584.

Harbor Grace, Newfoundland. (*McGill Coll. Herb.*) Cumberland House on the Saskatchewan. (*Drummond.*) Whiskey Island, Lake Huron. (*J. Bell.*) North and east shores of Lake Superior, and frequent on the northern prairies. (*Macoun.*)

(663.) **R. acicularis**, Lindl. Var. **Bourgeaulana**, Crépin.

R. blanda, Richards. in Frankl. Journ., 11.

R. cinnamomea, var. β . Torr. & Gray, Fl. I., 459.

R. Bourgeaulana, Crépin, l. c., 303.

This species is doubtless confounded with the preceding variety, but in the absence of a monograph of the western roses, I am unable to separate them. (*Macoun.*) Saskatchewan. (*Bourgeau.*)

(664.) **R. Californica**, Cham. & Schlecht.

R. fraxinifolia, Macoun's Cat., No. 582.

Qualcho Lake, northern British Columbia. (*Dawson.*) Common in woods around Victoria, Vancouver Island. (*Macoun.*)

(665.) **R. gymnocarpa**, Nutt.

Common in the valley of the Lower Fraser, and around Victoria, Vancouver Island. (*Macoun.*)

(666.) **R. Nutkana**, Presl.

R. cinnamomea, Hook. Fl. I., 200.

R. fraxinifolia, Hook. Fl. I., 199.

North-west coast of America. (*Menzies.*) Queen Charlotte Islands. (*Douglas.*) Sitka; Point Barrow to Mackenzie River; Fort Youcon. (*Rothr. Alaska.*) Eastward of the Mackenzie River. (*Hook. Arct. Pl.*)

Ontario,

ward to
olumbia
igation.
Herb.)

berland
d, Lake
ior, and

pin.

ety, but
nable to

mmon in

Victoria,

Islands.
Youcon.
rect. Pl.)

640. St Louis Lane

- (667.) **R. nitida**, Willd. Pursh, 344.

R. blanda, Pursh, 334 & 749.

Newfoundland. (*Morrison*.) Possibly mixed with *R. lucida*, in the Eastern Provinces. (*Macoun*.)

- (668.) **R. parviflora**, Ehrh.

R. Caroliniana, Michx. Fl. I., 295.

R. Lyonii, Pursh, 345.

Along Belly River, N.W.T., 1881. (*Dawson*.)

- (669.) **R. rubiginosa**, Linn. Sweet Briar.

R. suarvolens, Pursh, 346.

Introduced and run wild. Old Windsor Road; also, near Bedford, N.S. (*Lawson*.) Common in gardens and about dwellings, N.B. (*Fowler's Cat*.) Borders of cultivated grounds, Q. (*Brunet*.) Along roadsides, in fields in all the old settlements of Ontario.

- (670.) **R. micrantha**, Smith.

Sparingly escaped from cultivation in a few localities. Montreal and vicinity. (*McGill Coll. Herb*.) Vicinity of Kingston, Ont. (*J. Bell*.) Vicinity of Hamilton, Ont. (*Buchan*.)

NOTE.—There is much confusion regarding the distribution of the roses, and both in the east and west collectors should aim to get complete specimens of every species.

173. **PIRUS**, Linn. (PEAR. APPLE.)

- (671.) **P. coronaria**, Linn. American Crab-Apple.

Malus coronaria, Mill. Michx. Fl. I., 292.

Open woods and thickets, western Ontario. Valley of the Humber; Queenston Heights, and woods along Lake Erie to Amherstburg, Ont. (*Macoun*.) Prince's Island, Lake Medad, Ont. (*Logie*.) Chippewa and Malden, Ont. (*MacLagan*.) Kettle Point, Lake Huron. (*Gibson*.) Vicinity of London, Ont. (*Burgess*.) Aldboro, Ont. (*McGill Coll. Herb*.)

- (672.) **P. malus**, Linn. Cultivated apple.

Spontaneous in thickets, in fence corners and old fields, at Belleville and Picton, Ont. (*Macoun*.)

- (673.) **P. arbutifolia**, Linn. Choke-Berry.

Mespilus arbutifolia, Linn. Spec. 478. Michx. Fl. I., 290.

Common in swamps. Bedford, N.S. (*Lawson*.) Pictou, N.S. (*McKay*.) Straits of Canso. (*Ball*.) Common throughout Quebec and Ontario.

Var. **melanocarpa**, Hook. Fl. I., 204.

Mespilus arbutifolia, var. *melanocarpa*, Michx. Fl. I., 292.

P. melanocarpa, Willd. Pursh, 339.

The common form in New Brunswick. (*Fowler's Cat.*) Rocky Lake, N.S. (*Lindsay.*) Vicinity of Montreal. (*McGill Coll. Herb.*) Common in Ontario, and extending to Sturgeon Lake, Dawson Route, west of Lake Superior. (*Macoun.*)

(674.) **P. Americana**, DC. American Mountain-Ash.

Sorbus Americana, Marsh. Pursh, 341.

P. Aucuparia, Meyer. Hook. Arct. Pl., 290, in part.

Cool, rocky woods. Newfoundland. (*Morrison.*) Pictou, and Cape Breton Island, N.S. (*McKay.*) Halifax. (*Lawson.*) Common in woods, N.B. (*Fowler's Cat.*) Abundant in Quebec and northern Ontario, and especially so around Lake Superior. On islands in Lake Winnipegosis, Man., becoming a tree a foot in diameter. (*Macoun.*)

(675.) **P. sambucifolia**, Cham. & Schlecht.

Sorbus Aucuparia, var. β , Michx. Fl. I., 290.

P. Americana, Richards. in Frankl. Journ., 23.

P. Aucuparia, Meyer. Pl. Bourgeau, 256 and 263.

Winnipeg River, Man. (*Bourgeau.*) Maline Rapids, Dawson Route, west of Lake Superior; in woods north of Little Slave Lake, N.W.T., and westward through the Rocky Mountains. (*Macoun.*) Montreal Mountain. (*McGill Coll. Herb.*) Vicinity of Ottawa. (*Fletcher, Fl. Ott.*) North end of Lake Winnipeg. (*R. Bell.*) Sitka. (*Rothr. Alask.*) South Greenland. (*Hook. Arct. Pl.*) This and the preceding species either pass into each other or they are badly characterized. (*Macoun.*)

(676.) **P. rivularis**, Dougl.

Nootka Sound and other parts of North-west America. (*Menzies.*) Observatory Inlet. (*Scouler.*) Abundant on Vancouver Island and in the Lower Valley of the Fraser. (*Macoun.*) Queen Charlotte Islands and generally on the coast of British Columbia. Up the Skeena River, B.C., to ninety miles from the sea. (*Dawson.*) Sitka. (*Rothr. Alask.*)

174. CRATÆGUS, Linn. (WHITE THORN.)

(677.) **C. oxyacantha**, Linn. English Hawthorn.

Cultivated in many parts of Ontario. Fruiting abundantly. Planted for hedges in Nova Scotia, New Brunswick and Quebec.

ky Lake,
Common
e, west of

and Cape
common in
northern
is in Lake
Macoun.)

False Fl. King's Mountain

son Route,
e, N.W.T.,
Montreal
letcher, *Fl.*
thr. *Alask.*)
ing species
(*Macoun.*)

(*Menzies.*)
Island and
otte Islands
eena River,
thr. *Alask.*)

N.)

ly. Planted

7
P
L

(
P
L
o

a
(

bo
N
(6

L
L

- (678.) **C. coccinea**, Linn. Scarlet-fruited Thorn.

C. glandulosa, Willd. Hook. Fl. I., 201.

C. cordata, Hook. Fl. I., 201.

West coast of Newfoundland. (*J. Bell.*) Common in fields and thickets. Windsor, N.S. (*How.*) Pictou, N.S. (*McKay.*) Halifax, N.S. (*Sommers.*) Frequent in Quebec; common in Ontario and west to Winnipeg in coulees and stream valleys nearly to the Rocky Mountains. (*Macoun.*) Emerson, Man., and the Second Crossing of the Souris, N.W.T., Lat. 49°. (*Dawson.*)

- (679.) **C. tomentosa**, Linn. Black or Pear Thorn.

C. flava, Hook. Fl. I., 202.

Common in thickets, often becoming a tree of considerable size. Truro and vicinity, N.S. (*McGill Coll. Herb.*) Banks of streams, rather common, N.B. (*Fowler's Cat.*) Isle of Orleans. (*Shepherd.*) Lotbinière and Montreal. (*Brunet.*) Common throughout Ontario.

- Var. **pyrifolia**, Gray, Manual, 160.

C. pyrifolia, Ait. Hook. Fl. I., 201.

Some fine specimens at Government House, Fredericton, N. B. (*Fowler's Cat.*) Montreal Mountain. (*McGill Coll. Herb.*) Chaudière Falls, near Ottawa. (*Pursh.*) Michipicoten, Lake Superior; American Portage, Dawson Route, west of Lake Superior, and at Amherstburg, on Lake Erie. (*Macoun.*)

- Var. **punctata**, Gray, Manual, 2 ed., 124.

C. punctata, Jacq. Hook. Fl. I., 201.

Montreal Mountain or vicinity. (*Holmes.*) Common at Belleville and from Niagara to Amherstburg, Ont. (*Macoun.*)

- (680.) **C. subvillosa**, Schrader.

C. coccinea, var. (?) *mollis*, Torr. & Gray, Fl. I., 465.

C. tomentosa, var. *mollis*, Gray, Manual, 160.

Vicinity of Montreal. (*Holmes.*) Abundant along the Detroit River below Amherstburg; on Michipicoten Island, Lake Superior. (*Macoun.*) North of Lake Superior. (*R. Bell.*) Aldboro, Ont. (*McGill Coll. Herb.*)

- (681.) **C. Crus-galli**, Linn. Cockspur Thorn.

Abundant at Queenston Heights and westward to Amherstburg, on Lake Erie. (*Macoun.*) Niagara and Malden, Ont. (*MacLagan.*) About Lake Erie. (*Douglas.*)

(682.) **C. Douglasii**, Lindl.*C. punctata*, var. *brerispina*, Dougl. Hook. Fl. I., 201.*C. sanguinea*, var. *Douglasii*, Torr. & Gray, Fl. I., 464.*C. rivularis*, Macoun's Cat., No. 593.? *C. glandulosa*, Pursh, 337, in part.

On Vancouver Island at Victoria, and on the mainland from Lat. 49°-55°, near Macleod's Lake, B.C. (*Macoun.*)

(683.) **C. rivularis**, Nutt.

This species will likely be found in southern British Columbia.

175. AMELANCHIER, Medic. (JUNE-BERRY.)(684.) **A. alnifolia**, Nutt. Western June-Berry.*Pyrus sanguinea*, Pursh, 340, in part.*A. ovalis*, var. *semi-integrifolia*, Hook. Fl. I., 202.*A. Canadensis*, var. *alnifolia*, Torr. & Gray, Fl. I., 473.*A. Canadensis*, var. *pumila*, Torr. & Gray, Fl. I., 474.

Abundant on Vancouver Island and throughout British Columbia. The form on the prairies east of the Rocky Mountains and in the Peace River region, which produces such excellent berries, doubtless belongs here. (*Macoun.*) Queen Charlotte Islands, rare. (*Dawson.*)

(685.) **A. Canadensis**, Torr. & Gray.*Pyrus Botryapium*, Linn. Pursh, 339.*Mespilus Canadensis*, var. β , *cordata*, Michx. Fl. I., 291.*Amelanchier Botryapium*, Lindl. Hook. Fl. I., 202.*A. ovalis*, Hook. Fl. I., 202, in part.

This variety takes the form of a tree and is often found thirty feet high and having a diameter of six or more inches. It always grows in woods. Newfoundland. (*Todd.*) Common at Pictou, N.S. (*McKay.*) Windsor, N.S. (*How.*) Halifax. (*Lawson.*) Very common in open woods, N.B. (*Fowler's Cat.*) Abundant in Quebec and Ontario. (*Macoun.*) Islands in Lake Huron. (*J. Bell.*) North shore of Lake Superior. (*Macoun.*)

Var. **rotundifolia**, Torr. & Gray.*Mespilus Canadensis*, var. *rotundifolia*, Michx. Fl. I., 291.

Vicinity of London, Ont. (*Burgess.*) Near Amherstburgh, Ont. (*Macoun.*)

at. 49°-

ia.

.)

olumbia.
ne Peace
belongs

irty feet
grows in
McKay.)
in open
Ontario.
of Lake

gh, Ont.

S
C
(
I
H
o

(C

St
La
Ri
Pa
(C
(E
(S
coe
(6

Var. (?) **oblongifolia**, Torr. & Gray.*Mespilus Canadensis*, var. *obovatis*, Michx. Fl. I., 291.*Amelanchier ovalis*, DC. Hook. Fl. I., 202.*Pyrus ovalis*, Pursh, 340.

On rocky banks and the borders of dry fields, frequent. Windsor, N.S. (*How.*) Rather rare in New Brunswick. (*Fowler's Cat.*) Common in Quebec and Ontario, extending westward to the Rocky Mountains. (*Macoun.*) From the Saskatchewan to the Mackenzie River. (*Richardson.*) Between Lake Winnipeg and York Factory. (*R. Bell.*)

Var. (?) **oligocarpa**, Torr. & Gray.*Mespilus Canadensis*, var. *oligocarpa*, Michx. Fl. I., 291.*Pyrus sanguinea*, Pursh, 340, in part.*Amelanchier sanguinea*, DC. Hook. Fl. I., 203.

Newfoundland. (*Morrison.*) South coast of Labrador. (*Butler.*) St. Paul's and Magdalen Islands in the Gulf of St. Lawrence. (*McKay.*) Common in swamps, New Brunswick. (*Fowler's Cat.*) Cape Rouge, Q. (*Brunet.*) Rivière du Loup, Q. (*Thomas.*) Abundant in woods, Gaspé Peninsula; Cedar Swamp, north of Norwood, Peterboro Co., Ont.; Fishing Islands, Lake Huron; and Loon Portage, Dawson Route, West of Lake Superior. (*Macoun.*) Hudson's Bay. (*W. Williams.*)

XXXIII. SAXIFRAGACEÆ. SAXIFRAGE FAMILY.

176. **SAXIFRAGA**, Linn. (SAXIFRAGE.)(686.) **S. oppositifolia**, Linn.*S. spathulata*, var. (?) *arctica*, Torr. & Gray, Fl. I., 576.

Newfoundland and Labrador. (*Morrison.*) Anticosti in the Gulf of St. Lawrence. (*Goldie.*) Rocky Mountains near the highest summits, Lat. 52°-56. (*Drummond.*) Top of Mount Selwyn, Lat. 56°, Peace River Pass; Bow River Pass, Lat. 51°. (*Macoun.*) Top of Kootanie Pass (7,000 feet), Lat. 49°. (*Dawson.*) Cariboo Mountains, B.C. (*Cowley.*) Arctic seashore and islands. (*Franklin.*) Gulf of Boothia. (*Back.*) Between the Coppermine River and Point Turn Again. (*Simpson.*) Ounalashka, Cape Lisburne, Kotzebue Sound, and northern coast. (*Rothr. Alaska.*) Greenland. (*Hook. Arct. Pl.*)

(687.) **S. Eschscholtzii**, Sternb.Cape Newnham, north-west coast of America, Lat. 59°. (*David*

Nelson.) Behring's Straits. (*Menzies.*) Arctic seashore west of Mackenzie River. (*Franklin.*) Cape Lisburne and Kotzebue Sound. (*Rothr. Alask.*)

(688.) **S. Alizon**, Jacq.

Labrador. (*Morrison.*) On moist rocks opposite Rothsay, N.B. (*Prof. Bailey.*) At the Narrows, St. John River, N.B. (*J. E. Wetmore.*) Cape Bon Ami, Gaspé. (*J. Bell.*) High cliffs along the Gaspé coast; on rocks at the little falls St. Anne des Monts River, Gaspé; on rocks four miles north of Michipicotin, Lake Superior. (*Macoun.*) Upper Fall of the Rivière du Loup, Q. (*Thomas.*) North shore of Lake Superior. (*Prof. Ellis.*) Saskatchewan. (*Drummond.*) Greenland. (*Hook. Arct. Pl.*)

(689.) **S. serpyllifolia**, Pursh, 310.

Cape Newnham, north-west coast, Lat. 59°. (*David Nelson.*) Behring's Straits. (*Menzies.*) Cape Lisburne, Ounalashka, and Island of St. Lawrence. (*Rothr. Alask.*)

(690.) **S. caespitosa**, Linn.

? *S. androsacea*, Pursh, 310. Hook. Fl. I., 244.

S. exarata, Hook. Fl. I., 244.

Forteau Bay, Labrador. (*Butler.*) Newfoundland. (*McGill Coll. Herb.*) On cliffs along the Gaspé coast between Magdalen River and Ste. Anne des Monts, 1882. Bow River Pass, Rocky Mountains. (*Macoun.*) Frequent upon the Rocky Mountains, Lat. 52°-56°. (*Drummond.*) Fort Confidence and Coppermine River. (*Simpson.*) Kotzebue Sound and Ounalashka. (*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*)

Var. **uniflora**, Hook. Fl. I., 244.

S. venosa, Haworth. Hook. Fl. I., 244.

S. caespitosa, R. Brown. Ross. Voy. II., 192.

S. uniflora, R. Brown. Parry's 1st Voy.

Melville Island. (*Hopner.*) Arctic Islands. (*Parry.*) Smith's Sound, Greenland. (*Hook. Arct. Pl.*)

(691.) **S. sileniflora**, Sternb.

Abundant on rocks around Victoria, Vancouver Island. (*Macoun.*) Queen Charlotte Islands. (*Dawson.*) Behring's Straits. (*Menzies.*) Kotzebue Sound and Ounalashka. (*Rothr. Alask.*)

(692.) **S. adscendens**, Linn.

S. petræa, Hook. Fl. I., 245.

S. controversa, Sternb. Pl. Bourgeau, 256. Macoun's Cat., 642.

Alpine rivulets in the Rocky Mountains. (*Drummond.*) On the

west of
Sound.

ay, N.B.
(*etmore.*)
é coast;
on rocks
Upper
of Lake
eenland.

) Behr-
island of

Gill Coll.
river and
s. (*Ma-*
(*Drum-*
Kotzebue
arct. Pl.)

Smith's

(*Macoun.*)
(*Menzies.*)

2.
On the

C
7
M
L
R
V

(C

(C

isl
(I
Bo
an
Pe
Ar

(6

(D
(M
(6

L
tain

upper slopes of Mount Selwyn, Lat. 56°, Peace River Pass. (*Macoun.*) Rocky Mountains, Bow River Pass. (*Bourgeau.*) Pipe Stone Pass, 9,100 feet, and Kootanie River. (*Hector.*)

(693.) ***S. rivularis***, Linn.

S. petiolaris, R. Brown, Ross' Voy., 142.

S. Cymbalaria, & var. β , Sternb. Torr. & Gray, Fl. I., 574.

Labrador. (*McGill Coll. Herb.*) Arctic seashore and islands, abundant. (*Hooker.*) Elevated places in the Rocky Mountains. (*Drummond.*) Mount Selwyn, Peace River Pass. (*Macoun.*) Cariboo Mountains, B.C. (*Cowley.*) Top of Rocky Mountains, Kootanie Pass, Lat. 49°. (*Dawson.*) Little Whale River, Hudson's Bay. (*G. Barnston.*) Kotzebue Sound. (*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*)

Var. ***hyperborea***, Hook. Fl. I., 246.

S. hyperborea, R. Brown. Parry's 1st Voy., 274.

Melville Island. (*Parry.*) Rocky Mountains. (*Bourgeau.*)

Var. ***Laurentiana***, Engler.

S. Laurentiana, Seringe. Hook. Fl. I., 245.

Island of St. Lawrence in Behring's Straits. (*Chamisso.*)

(694.) ***S. exilis***, Stephan.

? *S. Sibirica*, Torr. & Gray, Fl. I., 573, in part.

Kotzebue Sound, and Bay of Eschscholtz. (*Rothr. Alask.*)

(695.) ***S. cernua***, Linn.

? *S. Sibirica*, Pursh. Hook. Fl. I., 246.

Labrador and Newfoundland. (*Pursh.*) Arctic sea shore and islands, abundant. (*Hooker.*) Common on the Rocky Mountains. (*Drummond.*) Top of Mount Selwyn, Peace River Pass, and in the Bow River Pass, Lat. 51°. (*Macoun.*) Between the Coppermine River and Point Turn Again. (*Simpson.*) Back's Great Fish River. (*Back.*) Point Barrow to Mackenzie River (*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*)

(696.) ***S. ranunculifolia***, Hook. Fl. I., 246.

Kettle Falls of the Columbia River and on the Rocky Mountains. (*Douglas.*) Under overhanging rocks just outside of Yale, B. C. (*Macoun.*)

(697.) ***S. Jamesii***, Torr.

Dry, rocky situations upon the more elevated of the Rocky Mountains, Lat. 52°-56°. (*Drummond.*)

(698.) **S. nivalis**, Linn.

Labrador. (*Pursh.*) Arctic seashore and Islands. (*Hooker.*) Back's Great Fish River. (*Back.*) Rocky Mountains. (*Drummond.*) Top of Rocky Mountains, Kootanie Pass. (*Dawson.*) Ounalashka, Cape Lisburne, and other stations along the coast. (*Roth. Alask.*) Greenland. (*Hook. Arct. Pl.*)

(699.) **S. Virginicensis**, Michx. Spring Saxifrage.

S. vernalis, Willd. Hook. Fl. I., 248.

York County, N.B. (*Prof. Bailey.*) Mouth of Mactaquac River, York Co., N.B. (*Vroom.*) From Riviere du Loup westward to the Pacific Coast. This species delights in dry gravelly soil on the margins of rivers and flowers early. Often named *nivalis* by the early collectors.

(700.) **S. reflexa**, Hook. Fl. I., 249.

S. Virginensis, Hook. Arct. Pl., as to Arctic habitat.

Shores of the Arctic Sea, between the Mackenzie and Coppermine Rivers. (*Richardson.*) Back's Great Fish River. (*Back.*)

(701.) **S. integrifolia**, Hook. Fl. I., 249.

Abundant on Vancouver Island, B.C. (*Macoun.*) Drew's Harbor, B.C., 1876. (*Dawson.*)

(702.) **S. hieracifolia**, Waldst. & Kit.

S. plantaginifolia, Hook. in Parry's 2nd Voy., 394.

Arctic Islands. (*Parry.*) Shores of the Arctic Sea, between the Mackenzie and Coppermine Rivers. (*Richardson.*) Island of St. Lawrence, and Kotzebue Sound. (*Rothr. Alask.*) East coast of Greenland. (*Hook. Arct. Pl.*)

(703.) **S. leucanthemifolia**, Michx. var. **ferruginea**, Torr. & Gray.

S. leucanthemifolia, Lodd. Hook. Fl. I., 250.

Rocks on the "Height of Land," in the Rocky Mountains, and at the Portage, near the source of the Columbia. (*Drummond.*) Dundas Island, B.C. (*Scouler.*) Behring's Straits. (*Menzies.*) Queen Charlotte Islands. (*Dawson.*)

Var. **Brunoniana**, Torr. & Gray.

S. stellaris, var. *Brunoniana*, Bong. Veg. Sitch., 140.

Queen Charlotte Islands. (*Dawson.*) Sitka and Cape Prince of Wales. (*Rothr. Alask.*) Norfolk Sound. (*Eschscholtz.*)

) Back's
Top of
ape Lis-
reenland.

e River,
d to the
margins
ollectors.

oppermine

Harbor,

ween the
St. Law-
reenland.

Torr. &

as, and at
Dundas
een Char-

Prince of

(

o
I
(
S

N

(7

B

(7

(704.) **S. Lyallii**, Engler.*S. Davurica*, Torr. & Gray, Fl. I., 569, in part.*S. Davurica*, Pl. Bourgeau, 257. Macoun's Cat., No. 637.*S. Davurica*, Hook. Fl. I., 250, in part.

On the slopes of the Rocky Mountains, Kootanie Pass, Lat. 49°
(*Dawson*.) Bow River Pass, Lat. 51°. (*Bourgeau*.) Alpine rivulets in
the Rocky Mountains, Lat. 52°-56°. (*Drummond*.)

(705.) **S. Davurica**, Pallas.*S. flabellifolia*, R.Br. Torr. & Gray, Fl. I., 569.

Behring's Straits. (*Menzies*.) Cape Lisburne, Kotzebue Sound, and
Ounalashka. (*Rothr. Alask.*)

(706.) **S. stellaris**, Linn.Labrador. (*Morrison*.) Greenland. (*Hook. Arct. Pl.*)Var. **comosa**, Poir.*S. foliosa*, R.Br. Hook. Fl. I., 251.Arctic Islands. (*Parry*.)(707.) **S. punctata**, Linn.*S. spicata* & *arguta*, Don. Hook. Fl. I., 251.*S. æstivalis*, Fisch. Torr. & Gray, Fl. I., 567.

Summits of the Rocky Mountains, Lat. 52°-56°. (*Drummond*.) Slopes
of the Rocky Mountains, Kootanie Pass, Lat. 49°. (*Dawson*.) Sledge
Island, and Northwest coast. (*David Nelson*.) Behring's Straits.
(*Menzies*.) Cape Prince of Wales, Sitka, Ounalashka, and Kotzebue
Sound. (*Rothr. Alask.*)

Var. **Nelsoniana**, Engler.*S. Nelsoniana*, Don. Hook. Fl. I., 251.*S. æstivalis*, var. β . Torr. & Gray, Fl. I., 568.

Cape Newnam, on the north-west coast, Lat. 59°. (*David Nelson*.)
Norton Sound. (*Rothr. Alask.*)

(708.) **S. nudicaulis**, Don.

North-west coast. (*David Nelson*.) Behring's Straits. (*Menzies*.)
Between Norton and Kotzebue Sounds. (*Rothr. Alask.*)

(709.) **S. heterantha**, Hook. Fl. I., 252.*S. Mertensiana*, Bong. Torr. & Gray, Fl. I., 568.*S. æstivalis*, var. δ . Torr. & Gray, Fl. I., 568.

Common on moist rocks of the Columbia, from its source to Lat. 49°.

(*Douglas.*) Cascades on Skagit River, B.C. (*Dawson.*) Cape Disappointment. (*Scouler.*) Sitka. (*Rothr. Alask.*)

(710.) **S. Hirculus**, Linn.

S. propinqua, R. Br. Ross' Voy. 142.

From the Saskatchewan to the Arctic seashore and islands, where it is common; Behring's Straits, Cape Hope, and Kotzebue Sound. (*Hooker.*) York Factory and Churchill River, Hudson's Bay. (*R. Bell.*) Back's Great Fish River. (*Back.*)

(711.) **S. flagellaris**, Willd.

S. setigera, Pursh, 312.

North-west coast. (*David Nelson.*) Behring's Straits. (*Menzies.*) Arctic islands, gathered by all Arctic voyagers. (*Hooker.*) Summits of the Rocky Mountains. (*Drummond.*) Baffin's Bay and Greenland. (*Hook. Arct. Pl.*)

(712.) **S. bronchialis**, Linn.

North-west coast. (*David Nelson.*) Behring's Straits. (*Menzies.*) "Height of Land," at the Portage of the Columbia River, on the west side of the Rocky Mountains. (*Drummond.*) Cascade Mountains, above Yale, B.C.; and Bow River Pass. (*Macoun.*) West Butte, Long, 49° 30', S. Kootanie Pass, Rocky Mountains, Lat. 49°; and Skeena River, B.C. (*Dawson.*) Kotzebue Sound, Wainright Inlet, and Ounalashka. (*Rothr. Alask.*)

Var. **cherlerioides**, Engler.

S. Pseudo-Burscriana, Fisch. Torr. & Gray, Fl. I., 565.

S. nitida, Ledeb. Rothr. Alask., 446.

Ounalashka and Bay of St. Lawrence. (*Chamisso.*) Gatcho Lake, B.C. (*Dawson.*)

(713.) **S. tricuspidata**, Retz.

Coast of Labrador. (*McGill Coll. Herb.*) From Lake Winnipeg to the Arctic sea and islands, and from Hudson's Bay to the Rocky Mountains. (*Hooker.*) Fort Confidence, Lat. 67°; between the Coppermine River and Point Turn Again. (*Back.*) North end of Lake Winnipeg to York Factory. (*R. Bell.*) North shore of Lake Superior. (*Agassiz.*) Rocks at the Peace River Canyon, Lat. 56°; and on rocks at Stuart's Lake. (*Macoun.*) On Slave and Back's Great Fish River. (*Back.*) Kotzebue Sound and Ounalashka; Fort Youcon, Lat. 66°. (*Rothr. Alask.*) Greenland, (*Hook. Arct. Pl.*)

e Disap-

where it
Sound.
(*R. Bell.*)

(*Menzies.*)
Summits
eenland.

(*Menzies.*)
he west
s, above
ong. 49°
a River,
alashka.

ho Lake,

niipeg to
y Moun-
permine
Winnipeg
(*Agassiz.*)
Stuart's
(*Back.*)
(*Rothr.*)

C
C
1
S
C

(

(

(A

(

(7

ne

(7

I

Isl

chi

isl

(714.) **S. aizoides**, Linn.

South-east coast of Labrador. (*Butler.*) On high cliffs along the Gaspé coast between the Magdalen River and Ste. Anne des Monts. (*Macoun.*) Indian Cove, Gaspé; west coast of Newfoundland. (*J. Bell.*) Barren country from Lat. 64° to the Arctic Sea and Islands, frequent. (*Richardson.*) Swamps and alpine rivulets of the Rocky Mountains. (*Drummond*) Boggy slope Mount Selwyn, Peace River Pass; and in the Bow River Pass, Lat. 51°. (*Macoun.*) Little Whale River, Hudson's Bay. (*Barnston.*) East coast of Hudson's Bay. (*R. Bell.*) Greenland. (*Hook. Arct. Pl.*)

177. BOYKINIA, Nutt.(715.) **B. occidentalis**, Torr. & Gray.

Saxifraga elata, Nutt. Torr. & Gray, Fl. I., 575.

To be looked for along the southern boundary of British Columbia.

(716.) **B. Richardsoni**, Gray.

Saxifraga Richardsonii, Hook. Fl. I., 247.

Arctic seashore between the Mackenzie and Coppermine Rivers. (*Richardson.*) West of Mackenzie River. (*Simpson.*) Kotzebue Sound. (*Rothr. Alask.*)

178. TOLMIEA, Torr. & Gray.(717.) **T. Menziesii**, Torr. & Gray.

Tiarella Menziesii, Pursh. Hook. Fl. I., 238.

Heuchera Menziesii, Hook. Fl. I., 237.

North-west coast of America; at Bank's Island. (*Menzies.*) Woods near the southern boundary of B.C. (*Cowley.*)

179. TELLIMA, R. Brown.(718.) **T. grandiflora**, R. Br.

Mitella grandiflora, Pursh, 314.

North-west coast of America. (*Menzies.*) Damp woods, Vancouver Island. (*Macoun.*) Cascade Mountains, east of Fort Hope, B.C. Misinchinea River, Rocky Mountains, Lat. 55°. (*Dawson.*) Sitka and the islands adjacent to the coast. (*Rothr. Alask.*)

(719.) **T. parviflora**, Hook. Fl. I., 239.

Lithophragma parviflora, Nutt. Torr. & Gray, Fl. I., 584.

Very abundant on Vancouver Island in the vicinity of Victoria. (*Macoun.*) On the Lower Fraser and near Yale, B.C. (*Hill.*)

180. TIARELLA, Linn. (FALSE MITRE WORT.)

(720.) **T. cordifolia**, Linn.

Rich shady woods and ravines. Rare in woods, Pictou, N.S. (*McKay.*) Truro, N.S. (*Lindsay.*) Rare in the northern counties, common about Fredericton, N.B. (*Fowler's Cat.*) Common in rich woods throughout Ontario and Quebec.

(721.) **T. unifoliata**, Hook. Fl. I., 238.

Heuchera longipetala, Moq. Hook. Fl. I., 237.

North-west coast of America. (*De Candolle.*) Height of Land in the Rocky Mountains, near the source of the Columbia, and at Portage River. (*Drummond.*) Vancouver Island, around Victoria. In woods north of Fort St. James, Stuart Lake, B.C. (*Macoun.*) Telegraph Trail near the Blackwater River; and at McLeod's Lake, B.C.; S. Kootanie Pass, Rocky Mountains, Lat. 49°. (*Dawson.*)

(722.) **T. trifoliata**, Linn.

T. laciniata, Hook. Fl. I., 239.

North-west coast of America. (*Menzies.*) Common on the coast, and in the Rocky Mountains on the west side of the ridge. (*Douglas.*) Height of Land, near a large glacier, upon the Rocky Mountains. (*Drummond.*) Queen Charlotte Islands; and Cascade Mountains, above Mount Hope. (*Dawson.*) Vancouver Island, near Victoria. (*Macoun.*) Sitka and Alaskan coast. (*Rothr. Alask.*)

181. MITELLA, Tourn. (MITRE WORT.)

(723.) **M. diphylla**, Linn.

Rich woods and banks. Rivière du Loup, Q. (*Thomas.*) Vicinity of Quebec, and cemetery of St. Charles. (*Brunet.*) Abundant about Montreal. (*McGill Coll. Herb.*) Very common in Ontario, especially in the lake and river counties.

etoria.

.)

(*Me-*
es, com-
n woods

Land 'n
Portage
n woods
uph Trail
Kootanie

he coast,
(*Douglas.*)
ountains.
ns, above
(*Macoun.*)

Vicinity
nt about
specially

728

One Sp. of ...
Two ...

(

f
S

P

(7

w
Ca
M
L

(7

Mc
mo

(72

(

(72

N
Van
Coa

(72

N
tain
On
Sitk

(724.) **M. nuda**, Linn.*M. reniformis*, Lam. Pursh, 314.*M. cordifolia*, Lam. Pursh, 314.

Very common in cool, damp woods or swamps, from Labrador, Newfoundland and Nova Scotia to the Pacific and northward to the Arctic Sea. One of our most widely distributed species.

Var. β . Torr. & Gray, Fl. I., 586.

M. prostrata, Michx. Fl. I., 270.

This form is easily known by the long runners producing terminal racemes.

(725.) **M. pentandra**, Hook.

Frequent in mountain woods, from Lat. 49° northward. Moist alpine woods in the Rocky Mountains. (*Drummond*.) Eastern base of the Cascade Mountains on Skagit River, B.C. On the slopes of the Rocky Mountains, Kootanie Pass, Lat. 49°. (*Dawson*.) In woods near McLeod's Lake, B.C. (*Macoun*.)

(726.) **M. trifida**, Graham.

Alpine rivulets, north of Smoky River, on the east side of the Rocky Mountains, in Lat. 56°, rare. (*Drummond*.) On the slopes of the mountains, near their summits, at Spence's Bridge, B.C. (*Macoun*.)

(727.) **M. caulescens**, Nutt.

Occurs on the southern boundary of British Columbia.

182. HEUCHERA, Linn. (ALUM-ROOT.)(728.) **H. micrantha**, Dougl.

North-west coast of America. (*Scouler*.) Common around Victoria, Vancouver Island. (*Macoun*.) East of Hope Mountain, Cascade Range; Coast Range, near Bute Inlet; Queen Charlotte Islands. (*Dawson*.)

(729.) **H. glabra**, Willd.

North-west coast of America, also Nootka. (*Hooker*.) Rocky Mountains, at Providence and Portage Rivers, in Lat. 54°. (*Drummond*.) On the Misinechina River, near the Pine Pass, Lat. 55°. (*Dawson*.) Sitka. (*Rothr. Alask.*)

(730.) **H. cylindrica**, Dougl.*H. ovalifolia*, Nutt. Torr. & Gray, Fl. I., 581.*H. glabella*, Torr. & Gray, Fl. I., 581.

On the declivities of low hills, and on the steep banks of streams, on the west side of the Rocky Mountains. (*Douglas*.) On the dry slopes along the Fraser and Thompson Rivers from Yale to Spence's Bridge. (*Macoun*.)

(731.) **H. Hallii**, Gray. (?)

Slopes of the Rocky Mountains in the Kootanie Pass, Lat. 49°. (*Dawson*.) Bow River Pass, 51°, 1879. (*Macoun*.) I refer the specimens obtained to this species, but they accord best with *H. glabella*, Nutt., which, however, Watson makes a synonym of *H. cylindrica*. The spike is long and the flowers are in sub-verticillate, conglomerate heads. It is certainly distinct from *H. cylindrica*.

(732.) **H. parvifolia**, Nutt.

On dry gravel ridges west of Fort Walsh, on the top of the Cypress Hills, N.W.T. (*Macoun*.)

(733.) **H. hispida**, Pursh.*H. Richardsonii*, R. Br. Hook. Fl. I., 237.

Dry banks of rivers, Lat. 54°-64°. (*Richardson*.) From the Saskatchewan west to the Rocky Mountains. (*Drummond*.) Western end of Lake Shebandowan, Dawson Route, 1872; from Manitoba to the Rocky Mountains, throughout the prairie and Peace River regions. (*Macoun*.) Abundant from the Lake of the Woods, westward. (*Dawson*.) Echimamish River to Oxford House, near Hudson's Bay, and along the Nelson River to Hudson's Bay. (*R. Bell*.)

(734.) **H. Americana**, Linn.*H. cortusa*, Michx. Fl. I., 171.*H. viscida*, Pursh, 187.

Woods near Amherstburg. Lake Erie, 1882. (*Macoun*.) Malden, Ont. (*Maclean*.)

183. CHRYSOSPLENIUM, Tft. (GOLDEN SAXIFRAGE.)(735.) **C. Americanum**, Schweinitz.*C. oppositifolium*, Walter. Pursh, 269.

Ditches and spring brooks, Pictou, N.S. (*McKay*.) Common about

beams, on
ery slopes
a Bridge.

Lat. 49°.
he speci-
glabella,
ica. The
lomerate

Cypress

e Saskat-
rn end of
t to the
regions-
(*Daw*.
Bay, and

Maldon,

RAGE.)

on about

i
a
I
C
L
E
E
(
E
(

G
ot
al
up
R
an
for
(L
(7

go
Vi
Ni
Br

springs in low wet places, N.B. (*Fowler's Cat.*) Common throughout Quebec and Ontario. (*Macoun.*) Saskatchewan. (*Richardson.*)

(736.) **C. alternifolium**, Linn.

In the woody, and principally in the barren country of British America. (*Richardson.*) On the Arctic islands. (*Parry.*) On the Rocky Mountains. (*Drummond.*) Vicinity of Quesnel, and up the Telegraph Trail to Fort St. James, Stuart Lake, B.C. (*Macoun.*) Ilgacho Brook, northern B.C. (*Dawson.*) Kotzebue Sound to Cape Lisburne. (*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*)

184. PARNASSIA, Tourn. (GRASS OF PARNASSUS.)

(737.) **P. palustris**, Linn.

Throughout Canada, as far north as the Arctic Circle, and in swamps in the Rocky Mountains, Lat. 52°-56°; Labrador and Newfoundland; and Cape Newnham, on the west coast, Lat. 59°. (*Hooker.*) Metapedia River, Q., near its mouth. (*Macoun.*) Island of Anticosti. (*Brunet.*) On damp soil, Little Metis, Q. (*Harrington.*) Under the bank at Fort Francis, Rainy River, and westward to the Pacific. (*Macoun.*) Pine River Pass, in the Rocky Mountains, and frequent in British Columbia. (*Dawson.*) From Oxford House to York Factory, and on the Churchill River. (*R. Bell.*)

(738.) **P. parviflora**, DC.

Labrador. (*Butler.*) Romantic Islet, north-east, Magdalen Islands, Gulf of St. Lawrence. (*McKay.*) Grand Métis, Q. (*Burgess.*) Borders of the Rivers Ste. Anne, Jacques Cartier, Q. (*Brunet.*) Very abundant along the Gaspé coast from Cape Rosier to Ste. Anne des Monts; also up the Ste. Anne River, Q.; north shore of Lake Superior, near Pic River. Red Bay, Lake Huron; Fort Edmonton on the Saskatchewan, and on rocks, Peace River, Canyon, Lat. 56°. (*Macoun.*) Sandy banks, formed by the floods in the rivers among Rocky Mountains, Lat. 52°-56°. (*Drummond.*)

(739.) **P. Caroliniana**, Michx.

P. palustris, Pursh, 208.

Crevices of rocks and on floating logs in rivers. Flat lands, Restigouche, N.B. (*Chalmers.*) Andover, Victoria, N.B. (*J. E. Wetmore.*) Vicinity of Quebec; Isle of Orleans. (*Brunet.*) Crevices of rocks, Niagara Falls; Presqu'Île Point, Lake Ontario; and Pott's Mill Dam, Brighton, Ont.; Red Bay, Lake Huron. (*Macoun.*) Banks of the

rocky Saugeen, Durham Township; also near Ancaster, Ont. (*Logie*.) Vicinity of London, Ont.; and Lake of the Woods. (*Burgess*.) Two miles south of London. (*Saunders*.) Near Sandwich, Ont. (*MacLagan*.) McLeod's Harbor, Cockburn Island, Lake Huron. (*J. Bell*.)

(740.) **P. Kotzebuei**, Cham. & Schlecht.

Coast of Labrador. (*McGill Coll. Herb.*) On the top of Mount Albert, Shickshock Mountains, Gaspé. (*Macoun*.) Rocky Mountains, Lat. 51°. (*Bourgeau*.) Rocky Mountains, Lat. 52°-56°. (*Drummond*.) Bear Lake and thence to the Arctic Sea. (*Richardson*.) Port Clarence to Cape Lisburne. (*Rothr. Alask.*) South Greenland. (*Hook. Arct. Pl.*)

(741.) **P. fimbriata**, Koenig.

North-west coast of America. (*Menzies*.) Elevated swamps in the Rocky Mountains, Lat. 52°-56°. (*Drummond*.) Slope of the Rocky Mountains, Kootanie Pass, Lat. 49. (*Dawson*.) Rocky Mountains, Lat. 51°. (*Bourgeau*.)

185. LEPTARRHENA, R. Br.

(742.) **L. pyrolifolia**, R. Br.

"Height of Land," on the west side of the Rocky Mountains, in Lat. 52°. (*Drummond*.) Cariboo Mountains, B.C. (*Cowley*.) Tsi-tsult Mountains, B.C.; Rocky Mountains, in the S. Kootanie Pass, Lat. 49°. (*Dawson*.) Behring's Straits. (*Menzies*.) Ounalashka, and Cape Prince of Wales. (*Rothr. Alask.*)

186. PHILADELPHUS, Linn. (MOCK ORANGE.)

(743.) **P. Lewisii**, Pursh.

Common in open pine woods on the north-west coast. (*Douglas*.) Princeton, B.C. (*Dawson*.) In the valley of the Lower Fraser, B.C. (*Cowley*.)

(744.) **P. Gordonianus**, Lindl.

On the southern boundary of British Columbia.

187. RIBES, Linn. (CURRANT. GOOSEBERRY.)

(745.) **R. Lobbii**, Gray. Macoun's Cat., No. 614.

On the roadside leading to Cedar Hill, Victoria, Vancouver Island. (*Macoun*.) Near Victoria. (*Hill*.)

(*Logie.*)
) Two
(*clagan.*)

Albert,
Lat. 51°.
) Bear
rence to
rect. Pl.)

os in the
Rocky
ountains,

, in Lat.
Tsi-tsult
Lat. 49°.
e Prince

E.)

Douglas.)
ser, B.C.

Y.)

Island.

(746.) **R. divaricatum**, Dougl.*R. triflorum*, Hook. & Arn. Bot. Beechey's Voy.*R. villosum*, Nutt. Torr. & Gray, Fl. I., 547.

A common bush on the banks of streams, near Indian villages, on the north-west coast, lat. 49°-52°. (*Douglas*.) Thickets, Vancouver Island, near Victoria; also in the valley of the Lower Fraser. (*Macoun*.)

Var. **irriguum**, Gray.*R. irriguum*, Dougl. Hook. Fl. I., 231.

Moist mountain rocks on the upper part of the Columbia River. (*Douglas*.) In woods along the British Columbia boundary, lat. 49°. (*Watson*.) In the Cascade Mountains, above Yale, B.C. ? (*Macoun*.)

(747.) **R. oxyacanthoides**, Linn.*R. hirtellum*, Michx. Hook. Fl. I., 231. Macoun's Cat., No. 605.*R. sacosum*, Hook. Fl. I., 231.

A very common species, being found from Newfoundland and Nova Scotia to the Pacific. It prefers swamps in Ontario, but lake and river margins in the interior. I suspect that Gray unites two species under this name, as the form found in the prairie region is very unlike the eastern one.

(748.) **R. rotundifolium**, Michx.*R. triflorum*, Willd. Hook. Fl. I., 230.*R. gracile*, Pursh, 165.

Pictou, N. S. (*McKay*.) River Avon, Windsor, N. S. (*Howe*.) Halifax, N. S. (*Lawson*.) Cape Rouge River, Q. (*Brunet*.) Not very common at Rivière du Loup. (*Thomas*.) Nonpareil, Q. (*MacLagan*.) Common at Prescott, Ont. [?] (*Billings*.) Vicinity of Hamilton, Ont. [?] (*Buchan*.) Several of the above references may apply to *R. oxyacanthoides*, the two references to Ontario being particularly doubtful.

(749.) **R. cynosbati**, Linn.*R. oxyacanthoides*, var. γ , Torr. & Gray, Fl. I., 546.*R. oxyacanthoides*, Pl. Bourgeau, 256.

Black River, St. John, N.B. (*Rev. J. P. Sheraton*.) Very common from Rivière du Loup, Q., to the Sault Ste. Marie, Ont. (*Macoun*.) Pembina Mountain, Man. (*Dawson*.)

(750.) **R. lacustre**, Poir.*R. oxyacanthoides*, Michx. Fl. I., 111.

Throughout Canada to Fort Franklin and Bear Lake, near the Arctic

circle. (*Richardson.*) It is abundant from Newfoundland, Labrador, and Nova Scotia, in swamps and wet woods, westward to the Rocky Mountains. Very common in British Columbia, but may belong principally to the variety. Point Barrow to Mackenzie River. (*Rothr. Alask.*)

Var. **parvulum**, Gray, Bot. Cal. I., 206.

Common in the valley of the Fraser and southern British Columbia. (*Macoun & Dawson.*)

Var. **molle**, Gray, Bot. Cal. I., 206.

On the Fraser, above Boston Bar, and doubtless common. (*Macoun.*)

Var. ——— ?

A form unlike all the others was collected in the valley of the Fraser in the summer of 1882, by A. J. Hill. Besides other points of distinction, its racemes are over twenty flowered. All the above forms need careful examination by collectors while the specimens are fresh.

(751.) **R. setosum**, Lindl.

R. oxyacanthoides, Hook. Fl. I., 230.

R. oxyacanthoides, var. β . Torr. & Gray, Fl. I., 546.

Banks of the Saskatchewan. (*Douglas.*) This is evidently the form of *R. oxyacanthoides*, which is so common in some parts of the prairie region, and in the sand on the borders of saline lakes. It may be a good species and seems to be very properly named. (*Macoun.*)

(752.) **R. rubrum**, Linn. Red Currant.

R. albinervium, Michx. Fl. I., 110.

Common in cold woods and swamps, from the Atlantic to the Pacific, and north to the Arctic Sea. Port Clarence and Kotzebue Sound; also Youcon River. (*Rothr. Alask.*)

(753.) **R. prostratum**, L'Her. Fetid Currant.

R. glandulosum, Ait. Richards. in Frankl. Journ., 6.

R. rigens, Michx. Fl. I., 110.

R. trifidum, Michx. Hook. Fl. I., 232.

R. laxiflorum, Richards. in Frankl. Journ., 7.

? *R. alpinum*, Hook. Arct. Pl., 291, as to Labrador.

R. Hudsonianum, Pl. Bourgeau, 256.

Newfoundland, Labrador, Nova Scotia, northward through the Laurentian region to Hudson's Bay, and westward to the Rocky Mountains and Peace River country.

Labrador,
e Rocky
ong prin-
(*Rothr.*

Columbia.

(*Macoun.*)

he Fraser
f distinc-
rms need
sh.

the form
he prairie
may be a
(.)

e Pacific,
und; also

the Lau-
ountains

756. Port Hammond B.C. I could not find it at Victoria nor
had Mr Cowley seen it there.
Abundant in ravines on Mount Finlayson c. 1885

(754.) **R. laxiflorum**, Pursh.*R. palustre*, var. β . Hook. Fl. I., 232.

North-west coast of America. (*Menzies*.) British Columbia from the coast north to Quesnel on the Fraser. (*Macoun & Dawson*.) Vicinity of Yale. (*Hill*.) Cape St. Elias and Sitka. (*Rothr. Alaska*.)

(755.) **R. bracteosum**, Dougl.

Common on Vancouver Island around Victoria, and possibly in the valley of the Lower Fraser. (*Macoun*.) Sitka. (*Rothr. Alaska*.)

(756.) **R. Hudsonianum**, Richards.*R. nigrum*, Richards. in Frankl. Journ., 1st ed., 6.

From Hudson's Bay to the Rocky Mountains in the west, and as far north as Lat. 57°. (*Drummond*.) Lake Winnepagoosis, Red Deer Lake and Porcupine Mountains, Man.; Cypress Hills, at Fort Walsh; Red Deer River, near Hand Hills, Long. 112°, N.W.T. Damp woods, northern British Columbia. (*Macoun*.) Blackwater River, B.C. (*Dawson*.) Oxford House to Kuce Lake, and around Cross Lake on Nelson River. (*R. Bell*.)

Var. β . Hook. Fl. I., 233.*R. petiolare*, Dougl.Mountains of the Columbia, above the Kettle Falls. (*Douglas*.)(757.) **R. floridum**, L'Her. Black Currant.*R. recurvatum*, Michx. Fl. I., 109.

Throughout Canada to Lat. 54°. (*Hooker*.) Near Brooklin, N.S. (*Howe*.) Common throughout New Brunswick, Quebec and Ontario, and westward to the Porcupine Mountains west of Manitoba. (*Macoun*.) Lake of the Woods; Emerson and First Crossing of Souris River, Man. (*Dawson*.)

(758.) **R. cereum**, Dougl.

Abundant along the Fraser, above Boston Bar, B.C. (*Macoun & Hill*.) Near Fort Hope on the Fraser, B.C. (*Dawson*.)

(759.) **R. viscosissimum**, Pursh.

Common in the recesses of the Rocky Mountains, and on dry plains, south of Lat. 49°. (*Douglas*.) Cascade Mountains on Skagit River, B.C. (*Dawson*.)

(760.) **R. sanguineum**, Pursh.

Abundant on the west coast, Lat. 49°-52°, usually growing in rocky

toria nor

1895

situations by the sides of streams. (*Menzies*.) Very common on Vancouver Island and in the valley of the Lower Fraser. (*Macoun, Hill & Dawson*.)

(761.) **R. aureum**, Pursh.

On the west fork of Milk River, south of Cypress Hills. (*Dawson*.)

XXXIV. CRASSULACEÆ. ORPINE FAMILY.

188. **PENTHORUM**, Cronqv. (DITCH STONE-CROP.)

(762.) **P. sedoides**, Linn.

In ditches and bogs. Norton and mouth of James River, N.B. (*Hay*.) Fredericton, N.B. (*Forster's Cat.*) Common in Ontario and western Quebec, but less frequent eastward.

189. **SEDUM**, Torr. (STONE-CROP. ORPINE.)

(763.) **S. acre**, Linn. "Mountain Moss."

Cultivated as a bordering for flower-beds, but escaped in a number of places to moist, rocky hillsides where it grows in great profusion, as at Pictou Harbor, Bay of Quinte, and at Niagara Falls. (*Macoun*.) Rocks west of the toll-gate, Prescott, and abundant upon rocks a mile west of Brockville, near the river. (*Billings*.) Vicinity of Ottawa. (*Fletcher, Fl. Ott.*) Vicinity of London. (*Burgess*.) Hampton, N.B. (*J. Brittain*.) Norton, N.B. (*Hay*.) Bedford and Dutchville, N.S. (*Lawson & Sommers*.)

(764.) **S. stenopetalum**, Pursh.

On rocky, mountain slopes. Frequent on the east side of the Rocky Mountains. (*Drummond*.) On the Cypress Hills; in the Bow River Pass; and frequent on rocky slopes in the Peace River Pass and British Columbia. (*Macoun*.) Kootanie Pass, Lat. 49°; Pine River Pass, Lat. 55°, and along the wagon road at Lytton, B.C. (*Dawson*.)

(765.) **S. spathulifolium**, Hook.

Abundant on rocks around Victoria, Vancouver Island. (*Macoun & Hill*.) On Dean or Salmon River, B.C.; Queen Charlotte Islands. (*Dawson*.)

(766.) **S. obtusatum**, Gray. (?).

A species, which may be the above, has been collected in the Lower

on Van-
oun, *Hill*

awson.)

ROP.)

s River,
Ontario

E.)

umber of
on, as at
) Rocks
e west of
Fletcher,
(*J. Brit-*
(*Lawson*

e Rocky
ow River
l British
ass, Lat.

Lacoue &
Islands.

e Lower

771. New Westminster. In log of Monst Finlayson. V. I.

Valley of the Fraser, B.C., by A. J. Hill, C.E., but until fresh specimens are obtained the reference is doubtful.

(767.) **S. ternatum**, Michx.

Rocks on the Niagara River and Lake Erie. (*Douglas*.) Vicinity of Hamilton, Ont. (*Buchan*.) This is a doubtful species and should be looked for.

(768.) **S. Telephium**, Linn. Live-for-Ever.

Escaped from cultivation in nearly all the old settlements throughout Canada. It establishes itself by roadsides and around garden fences, and soon becomes a troublesome weed.

(769.) **S. Rhodiola**, DC.

Arctic seashore and islands. (*Richardson*.) Newfoundland and Labrador. (*Morrison*.) St. Paul's Island, Gulf of St. Lawrence. (*McKay*.) Cape Breton, N.S. (*Lawson*.) On exposed cliffs, St. John Co., N.B. (*Fowler's Cat*.) Il-ga-chug Mountains, B.C.; Queen Charlotte Islands. (*Dawson*.) Norton and Kotzebue Sounds. (*Rothr. Alask.*) Seacoast west of Mackenzie River. (*Back*.) Greenland. (*Hook. Arct. Pl.*)

(770.) **S. rhodanthum**, Gray.

Bow River Pass on Mountain slopes, Lat. 49°. (*Dawson*.) Rocky Mountains. (*Bourgeau*.) The above references may apply to the preceding species, as I am responsible for the change without having seen the specimens.

The whole genus needs to be carefully studied from living specimens, as the western forms are numerous, and either quite variable or we have undescribed species.

XXXV. DROSERACEÆ. SUNDEW FAMILY.

190. **DROSERA**, Linn. (SUNDEW.)

(771.) **D. rotundifolia**, Linn. Round-leaved Sundew.

A common inhabitant of peat bogs and marshes, from Newfoundland, Labrador and Nova Scotia westward to the Pacific and north to, and beyond, the Arctic Circle.

(772.) **D. Anglica**, Hudson.

In boggy ground along the shores of Lake Huron, Bruce peninsula.

(*Macoun.*) Near Cumberland House, Lat. 54°. (*Richardson.*) Northwest coast of British Columbia. (*Menzies.*) Newfoundland. (*Watson.*)

(773.) **D. intermedia**, Drev. & Hayne, var. **Americana**, D.C.

D. longifolia, Michx. Macoun's Cat., No. 221.

Bogs and borders of lakes, N.B., common. (*Fowler's Cat.*) Frequent in bogs and on the margins of lakes throughout Quebec and northern Ontario, and northwest to the Porcupine Mountains, Man., Lat. 53°.

(774.) **D. linearis**, Goldie.

Marshes at Lake Simcoe. (*Gol'ie.*) Chicken Bay and at Oliphant, Bruce peninsula, Ont. (*Macoun.*) McLeod's Harbor and Cockburn Island, Lake Huron. (*J. Bell.*) Rosseau River, eastern Manitoba. (*Burgess.*) Lake Superior. (*Provancher.*) In a swamp near Jasper's Lake, Rocky Mountains. (*Drummond.*)

XXXVI. HAMAMELACEÆ. WITCH HAZEL FAMILY.

191. HAMAMELIS, Linn. (WITCH HAZEL.)

(775.) **H. Virginiana**, Linn.

In thickets and open woods; rather local. Common at Pictou, N.S. (*McKay.*) Halifax. (*Lawson.*) Damp rich woods, N.B., rather rare. (*Fowler's Cat.*) Point Levis and Isle of Orleans, Q. (*Brunet.*) Common near Prescott, Ont. (*Billings.*) Scarce in Hastings and Northumberland Cos., Ont. (*Macoun.*) Abundant from Toronto westward in Ontario. (*Ellis, Buchan & Burgess.*)

XXXVII. HALORAGCEÆ. WATER MILL-FOIL FAMILY.

192. MYRIOPHYLLUM, Vaill. (WATER MILLFOIL.)

(776.) **M. spicatum**, Linn.

Abundant in stagnant pools and weedy lakes. West coast of Newfoundland. (*J. Bell.*) In deep water. Konchibouguac, and Kennebecasis Rivers, N.B. (*Fowler's Cat.*) Small lakes along the Gaspé coast; abundant in the northern counties of Ontario; and in all large fresh water ponds and brackish lakelets in the prairie region. (*Macoun.*) Lake Temiscouata, and near Montreal, Q. (*MacLagan.*) St. Lawrence

North-
Watson.)

, D.C.

Frequent
northern
53°.

Elephant,
Lockburn
Manitoba.
Jasper's

ton, N.S.
her rare.
Common
humber-
ward in

OIL.)

of New-
Kenne-
e Gaspé
all large
Macoun.)
Lawrence

178. A few bushes to left of Chelsea Road about 5 miles from
Ottawa. In flower 21. Oct. 1883

781. Opposite Chinaman's Ranch 10 miles above
Spencer's Bridge B.C. also near Victoria B.C.
Mallock's Bay, Ottawa.

River near Prescott. (*Billings.*) Common in western Ontario. (*Burgess & Buchan.*) North to Bear Lake. (*Richardson.*) North-east from Mackenzie River. (*Hook. Arct. Pl.*)

(777.) **M. verticillatum**, Linn.

In marshes south side of the Bay of Quinte at Belleville, still water and in the "drowned" lands along the Trent, between Hastings and ^{'s} Falls, Ont.; marshes around the base of the Poreupine Mountains, Man., Lat. 52°. (*Macoun.*) Marshes, Burlington Bay, Hamilton, Ont. (*Logie.*)

(778.) **M. heterophyllum**, Michx.

Lakes and rivers, apparently rare. River Trent, near Heely's Falls, Northumberland Co., Ont. North River above Round Lake, Peterboro Co., Ont. At the mouth of the Sydenham River, Owen Sound, abundant; also in a marsh on the lake shore at Port Stanley, Ont. (*Macoun.*) Niagara Falls. (*MacLagan.*) Vicinity of Hamilton, Ont. (*Logie.*) Parry Sound, Georgian Bay. (*Burgess.*)

(779.) **M. tenellum**, Bigel.

In watery places, Newfoundland. (*De Candolle.*) Rare at Richibucto, N.B. (*Fowler's Cat.*) Saguenay River, Q. (*A. T. Drummond.*) Plant at the mouth of Buck's River, Stanhope, Victoria Co., Ont. (*Macoun.*) Lake Joseph, Muskoka, Ont. (*Burgess.*)

193. PROSERPINACA, Linn. (MERMAID WEED.)

(780.) **P. palustris**, Linn.

Wet swamps, rather rare. Vicinity of Montreal. (*MacLagan.*) Banks of the Nation River, eastern Ontario. (*Billings.*) Marshes along Lakes Isaac and Sky, Bruce Peninsula, also Fishing Islands, Lake Huron. (*Macoun.*)

194. HIPPURIS, Linn. (MARE'S TAIL.)

(781.) **H. vulgaris**, Linn.

Pools of water and margins of lakes from Newfoundland, Labrador and Nova Scotia to the Pacific and north to Alaska and the Arctic Sea. This species is widely distributed, and may on the coasts, both east and west, pass into the next.

(782.) **H. maritima**, Hellenius.

Mouth of Haye's River, near York Factory, Lat. 57°. (*Richardson.*)

Labrador. (*Morrison*.) In salt marshes along the Gaspé coast, at Cape Rosier, Grand Vallée, and below St. Anne des Monts. (*Macoun*.) Straits of Schismareff, and Bay of Eschscholtz. (*Chamisso*.) Kotzebue Sound and delta of the Buckland River. (*Rothr. Alask.*)

(783.) **H. montana**, Ledeb.

Turfy places. Ounalashka. (*Rothr. Alask.*)

XXXVIII. ONAGRACEÆ. EVENING PRIMROSE FAMILY.

195. LUDWICIA, Linn. (FALSE LOOSESTRIFE.)

(784.) **L. palustris**, Ell.

Isuardia palustris, Linn. Hook. Fl. I., 215.

I. nitida, Michx. Fl. I., 87.

Ditches and springs. Pietou, N.S. (*McKay*.) Wilmot, Annapolis, N.S. (*How*.) Nashwaaksis River, N.B. (*J. Moser*.) Saint Stephen, N.B. (*Vroom*.) Petiteodiac, Nauwigewauk, and Taberville, N.B. (*J. Brittain*.) Nicolet, Quebec. (*MacLagan*.) Bank of the river St. Pierre, near Montreal, Q., 1821. (*Holmes*.) Very common in ditches and dried up ponds throughout Ontario. (*Macoun*.) Saskatchewan River. (*Richardson*.)

(785.) **L. alternifolia**, Linn.

L. macrocarpa, Michx. Fl. I., 89.

Rhexia linearifolia, Poir. Pursh, 259.

Isuardia alternifolia, DC. Hook. Fl. I., 214.

In swamps, Canada. (*Torr. & Gray*, Fl. I., 522, also, *Hooker*, Fl. I., 214.) This is a doubtful species and should be looked for along Lake Erie.

196. EPILOBIUM, Linn. (WILLOW HERB.)

(786.) **E. angustifolium**, Linn. "Fire Weed."

In woods and fields, from Newfoundland, Labrador and Nova Scotia, west to the Pacific and North to the mouth of the Mackenzie, Lat. 69°, west to Alaska and east to Greenland. A fine tall and beautiful species.

Var. **canescens**, Wood.

This is a white flowered and silvery podded variety, which has been

, at Cape
Macoun.)
Kotzebue

ILY.

FE.)

nnapolis,
Stephen,
N.B. (*J.*
St. Pierre,
ches and
an River.

er, *Fl. L.*,
ong Lake

)

va Scotia,
Lat. 69°,
il species.

has been

3
2

f
(

C
(
n
a
E
e
C
(

W

collected at Marmora Village, Hastings Co., Ont., and Owen Sound. (*Macoun.*) Cariboo Mountains, B.C. (*Cowley.*)

(787.) ***E. latifolium***, Linn.

Coast of Newfoundland. (*McGill Coll. Herb.*) Amour Bay, south coast of Labrador. (*Butler.*) On gravel deposits, on the Dartmouth, Magdalen and Ste. Anne des Monts Rivers, Gaspé; Bow River Pass, Rocky Mountains; and at the Rocky Mountain Cañon on Peace River, Lat. 56°. (*Macoun.*) Banks of rivers in the Rocky Mountains, Lat. 52°-56°. (*Drummond.*) Kootanie Pass, Lat. 49°; Misinehina River Pine Pass, Lat. 55°, and on the Coast Range near Bute Inlet, B.C. (*Dawson.*) Shores and islands of the Arctic Sea in every degree of longitude. (*Hooker.*) Behring's Straits. (*Chamisso.*) Norton Sound to Point Barrow, Sitka and Ounalashka. (*Rothr. Alask.*) On the Churchill River, near Hudson's Bay. (*R. Bell.*) Greenland. (*Hook. Arct. Pl.*)

(788.) ***E. luteum***, Pursh.

Grassy places in the valleys of Ounalashka. (*Chamisso.*) Sitka and Ounalashka. (*Rothr. Alask.*)

(789.) ***E. alpinum***, Linn.

South coast of Labrador. (*Brunet.*) Alpine rivulets in the Rocky Mountains. (*Drummond.*) Observatory Inlet, North-west America, Lat. 56°. (*Menzies.*) Sitka. (*Rothr. Alask.*)

Var. ***nutans***, Lehm. Hook. Fl. I., 205.

Observatory Inlet, North-west America. (*Menzies.*) On the trail a few miles east of McLeod's Lake, B.C., Lat. 55°. (*Macoun.*)

(790.) ***E. organifolium***, Lam.

E. alpinum, var. *majus*, Wahl. Gray, Manual, 177.

Knowlton, Eastern Townships, Q. (*McGill Coll. Herb.*) Coast of Gaspé above Mont Louis; Mount Albert, Shichshock Mountains, Gaspé. (*Macoun.*) Bow River Pass, Rocky Mountains, Lat. 51°; Mountains near Little Slave Lake, Lat. 55°. On the trail between Stuart's River and the Nechaceo, B.C. (*Macoun.*) Top of the Rocky Mountains, Kootanie Pass. (*Dawson.*) Alpine woods, sides of rivulets, and shady elevated spots on the Rocky Mountains, Lat. 52°-56°. (*Drummond.*) Ounalashka. (*Chamisso.*) Greenland. (*Hook. Arct. Pl.*)

(791.) ***E. tetragonum***, Linn.

Harbor Grace, Newfoundland. (*McGill Coll. Herb.*) From Lake Winnipeg across the plains to the valleys of the Rocky Mountains; and

north to Lat. 64°; frequent. (*Richardson & Drummond.*) North-west coast near the sea. (*Scouler.*) Vicinity of Quebec and Tadousac. (*Brunet.*) Common on the prairies, west of Manitoba; also in Northern British Columbia and the upper valley of the Fraser. (*Macoun.*) Queen Charlotte Islands and the mountains along the coast of British Columbia. (*Dawson.*) York Factory and Nelson River Valley. (*R. Bell.*)

(792.) ***E. coloratum***, Muhl.

E. tetragonum, Pursh, 259.

Common in Nova Scotia, New Brunswick, Quebec and Ontario. This seems to be the eastern form of the preceding species, and a careful examination of living specimens is necessary to separate them. Red Deer River, near the Hand Hills, N.W.T., Long. 112°. (*Macoun.*) Slopes of the Rocky Mountains, Kootanie Pass. (*Dawson.*) Plains of the Saskatchewan. (*Richardson.*)

(793.) ***E. minutum***, Lindl. Hook. Fl. I., 207.

North-west coast of America. (*Menzies.*) On moist rocks near springs, on the high mountains of the Upper Columbia River. (*Douglas.*) Lake Athabasca, near Fort Chipewyan, Lat. 59°. (*Macoun.*)

(794.) ***E. palustre***, Linn.

Labrador. (*Morrison.*) Mount Albert, Shickshock Mountains, Gaspé, Q.; Moose Jaw Creek and Old Wives Lakes, and numerous other localities throughout the prairie region, N.W.T. (*Macoun.*) Sitka. (*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*)

Var. ***lineare***, Gray.

E. oliganthum, Michx. Hook. Fl. I., 208.

E. rosmarinifolium, Pursh, 259.

E. tenellum, Raf. Hook. Fl. I., 207.

E. palustre, var. *albescens*, Richards. in Frankl. Journ., 12.

E. palustre, var. *albiflorum*, Hook. Fl. I., 207.

E. palustre, Gray, Manual, 1st ed., 135.

Abundant in peat bogs and marshy places, from Labrador and Nova Scotia to British Columbia, and north to Lat. 64° on the Mackenzie River.

(795.) ***E. paniculatum***, Nutt.

Abundant on newly cleared land at Oxendon, Colpoy's Bay, Georgian Bay, Lake Huron; common on dry sand hills near the source of the Qu'Appelle, and on the southwestern plain, N.W.T. (*Macoun.*) Vancouver Island, near Victoria. (*Dawson.*)

North-west
Tadousac.
Northern
n.) Queen
sh Colum-
(*R. Bell.*)

Ontario.
and a care-
ate them.
(*Macoun.*)
Plains of

ar springs,
(*Douglas.*)

Mountains,
numerous
(*Macoun.*)

and Nova
Mackenzie

Georgian
ce of the
n.) Van-

Woolrich, 160,

- (796.) **E. molle**, Torrey. Macoun's Cat., No. 693.

Grenville, Durham, and Cowansville, Eastern Townships, Q. (*McGill Coll. Herb.*) In a tamarac swamp north of Belleville, Ont. also in boggy ground, Lake Athabasca. (*Macoun.*)

- (797.) **E. affine**, Bongard.

Sitka. (*Rothr. Alask.*)

- (798.) **E. roseum**, Schreb.

Sitka. (*Rothr. Alask.*)

- (799.) **E. pubescens**, Roth. (?) Macoun's Cat., 692.

A species bearing this name was reported from Nootka many years ago, but the name has been allowed to drop as authentic specimens are unknown. In the spring of 1875 I collected a number of immature specimens of a remarkable form, wholly unlike any other species I have ever seen, on Cedar Hill, near Victoria, on Vancouver Island. The specimens obtained were very pubescent, and were possibly of this species. Mature specimens are much desired.

197. **ÆNOTHERA**, Linn. (EVENING PRIMROSE.)

- (800.) **Æ. biennis**, Linn. Common Evening Primrose.

Æ. parviflora, Pursh, 261.

Common under one form or another from the Atlantic to the Pacific. The various forms are enumerated below, and localities given where specimens have been obtained.

- Var. **grandiflora**, Lindl.

Æ. grandiflora, Ait. Pursh, 261.

Vicinity of Ottawa. (*Fletcher Fl. Ott.*) This seems to be the common form on good soil in Ontario.

- Var. **muricata**, Lindl.

Æ. muricata, Linn. Pursh, 261.

Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Gravel slopes, Gaspé coast, Q.; sandy shores and river banks, Ont., and common on the interior plains. (*Macoun.*) Saskatchewan. (*Drummond.*)

- Var. **hirsutissima**, Gray.

Æ. Hookeri, Torr. & Gray, Fl. I., 493.

Great Shuswap Lake, British Columbia. (*Dawson.*)

(801.) ***Æ. albicaulis***, Nutt.*Æ. pallida*, Lindl. Torr. & Gray, Fl. I., 495.

Very common in the dry part of the prairie region. (*Macoun & Dawson.*) In the vicinity of Spence's Bridge, B.C. (*Hill.*)

(802.) ***Æ. serrulata***, Nutt. var. ***Douglasii***, Torr. & Gray.*Æ. leucocarpa*, Lohm. Hook. Fl. I., 210. Macoun's Cat., No. 701.

Common on limestone rocks on the Red and Assiniboine Rivers. (*Douglas.*) Dry banks of the Saskatchewan. (*Drummond.*) Common on dry sandy or gravelly slopes throughout the prairie region. (*Macoun & Dawson.*)

(803.) ***Æ. pumila***, Linn.*Æ. pusilla*, Michx. Fl. I., 225.*Æ. riparia*, Hook. Fl. I., 212.

Common on river banks amongst sand. Common at Pictou, N.S. (*McKay.*) Windsor, Halifax, Straits of Canso, Guysboro, Wilmot, and Annapolis, N.S. (*Sommers' Fl. N.S.*) Very frequent in dry fields and by roadsides, N.B. (*Fowler's Cat.*) Common near Quebec. (*Brunet.*) Beven's Lake, River Rouge, Q. (*D'Urban.*) Island of Orleans and ancient Lorette. (*Thomas.*) Nicolet, Q. (*MacLagan.*) Vicinity of Montreal. (*Holmes.*) Lake Mistassini, Q. (*Richardson.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) In the northern parts of Addington, Hastings, Peterboro, and Victoria Counties, Ont. (*Macoun.*) Vicinity of Hamilton, Ont. (*Logie.*) Mississauga Island, Lake Huron, and north shore of Lake Superior. (*R. Bell.*) Parry Sound, and Lake of the Woods. (*Burgess.*)

(804.) ***Æ. chrysantha***, Michx.

On drier ground than the preceding. Halifax, N.S. (*McKay.*) Windsor, N.S. (*How.*) Vicinity of Quebec, and at the Quarantine Station. (*Brunet.*) St. Helen's Island, Q.; Chippewa, Ont. (*MacLagan.*) Queenston Heights and Niagara Falls; twenty miles up the Kaministiquia River, Lake Superior; Dawson Route, near Lake Shebandowan, west of Lake Superior. (*Macoun.*) Hudson's Bay. (*Michaux.*) [?]

(805.) ***Æ. fruticosa***, Linn.*Æ. hybrida*, Michx. Fl. I., 225.

Lucyfield, near Halifax. (*Lawson.*) Grand Lake, N.S. (*Sommers.*) Island of Montreal. (*Goddie.*)

NOTE.—I have given all the localities from which the two last mentioned species have been reported. The last I believe to be really *Æ. chrysantha*, and that some of the reported occurrences of *Æ. pumila*

[Macoun &

May.

No. 701.

me Rivers.

Common

ie region.

Pietou, N.S.

Wilmot, and

7 fields and

(Brunet.)

reans and

Vicinity of

Vicinity of

Addington,

) Vicinity

luon, and

nd Lake of

(McKay.)

Quarantine

Maclagan.)

e Kaminis-

bandowan,

ux.) [?]

(Sommers.)

o last men-

a really *Æ*.

Æ. pumila

1
C
(

(
(

a
I
R
(8

W
(A
(8

W
(A

(8

I
the
(81

I
like

should likewise be referred to this species. Watson, in his revision of the genus, makes *E. chrysantha* merely a form of *E. pumila*, but I believe the Ontario form to be distinct from the latter. The attention of botanists is invited to the above species.

- (806.) ***E. strigulosa***, Torr. & Gray. Macoun's Cat., No. 702.

E. contorta, Dougl. Hook. Fl. I., 214.

E. parvula, Nutt. Torr. & Gray, Fl. I., 511.

On the dry slopes of Cedar Hill, near Victoria, Vancouver Island. (Macoun.)

- (807.) ***E. caespitosa***, Nutt.

E. scapigera, Pursh, 263.

E. montana, Nutt. Torr. & Gray, Fl. I., 500.

E. marginata, Nutt. Torr. & Gray, Fl. I., 500.

On dry and scarped hills, along the face of the Côteau de Missouri; also on high hills near Strong Current Creek and north of the Cypress Hills, N.W.T. (Macoun.) Short Creek, Souris River, and on the Milk River near the Rocky Mountains. (Dawson.)

- (808.) ***E. triloba***, Nutt.

E. heterantha, Nutt. Macoun's Cat., No. 700.

On hard clay soil, east of the Hand Hills, Long. 112°; also near Old Wives' Lakes, and westward to and north of the Cypress Hills. (Macoun.) Traders' Road, west of the Souris, Lat. 49°. (Dawson.)

- (809.) ***E. breviflora***, Torr. & Gray.

On the western end of Hand Hill Lake, Long. 112°; also at Old Wives Lake, and Gull Lake, north of the Cypress Hills, N.W.T. (Macoun.)

198. CODETIA, Spach.

- (810.) ***C. amœna***, Lilja.

Eriothera amœna, Lehm. Torr. & Gray, Fl. I., 503.

E. Lindleyi, Dougl. Torr. & Gray, Fl. I., 502.

E. rubicunda, Hook. & Arn. Torr. & Gray, Fl. I., 502.

E. vinosa, Torr. & Gray, Fl. I., 503.

From Vancouver Island, near Victoria. (Dawson.) Reported from the coast south of the Fraser, B.C.

- (811.) ***C. quadrivulnera***, Spach.

Eriothera quadrivulnera, Dougl. Hook. Fl. I., 213.

Puget Sound and upper valley of the Columbia. (Douglas.) Will likely be found north of Lat. 49°.

199. CLARKIA, Pursh. (CLARKIA.)**(812.) C. pulchella, Pursh.**

From the Great Falls of the Columbia to the Rocky Mountains.
(*Douglas.*) Near Osoyoos Lake, southern boundary of British Columbia. (*Dawson.*)

200. BOISDUVALIA, Spach. (BOISDUVALIA.)**(813.) B. densiflora, Watson.**

Enothera densiflora, Lindl. Torr. & Gray, Fl. I., 505.

Vancouver Island, near Victoria. (*Dawson.*)

(814.) B. glabella, Walp.

Enothera glabella, Nutt. Torr. & Gray, Fl. I., 505.

Pile of Bones Creek, Souris Plain; Weedy Lake, west of Old Wives Lakes and on the Cypress Hills, N.W.T. (*Macoun.*)

201. GAURA, Linn. (GAURA.)**(815.) G. coccinea, Nutt.**

G. marginata, Lehm. Hook. Fl. I., 208.

G. glabra, Lehm. Hook. Fl. I., 209.

Plains of the Red and Saskatchewan Rivers. (*Drummond, Douglas.*) Abundant near Brandon and westward, on gravelly banks throughout the prairie region. (*Macoun.*) Badger Creek; dry banks, Wood End, Souris River; and westward to the mountains, Lat. 49°. (*Dawson.*)

(816.) G. biennis, Linn.

Dry banks. Moffatt's Island, Montreal; Malden, Ont. (*MacLagan.*) About Montreal. (*Cleghorn.*)

202. CIRCEA, Tourn. (ENCHANTER'S NIGHTSHADE.)**(817.) C. alpina, Linn.**

Common in damp, shady woods, from the Atlantic to the Pacific. Sitka. (*Rothr. Alaska.*) This is wholly a forest species.

Mountains.
ish Colum-

LIA.)

Old Wives

Douglas.)
hroughout
Wood End,
Lawson.)

MacLagan.)

SHADE.)

e Pacific.

Longwood, N. H. 1853

(818.) **C. Lutetiana**, Linn.*C. Lutetiana*, var. *Canadensis*, Linn. Hook. Fl. I., 215.

Magdalen Islands, Gulf of St. Lawrence, and Pictou, N.S. (*McKay*.)
 Queensbury, N.B. (*Bailey*.) Keswick Ridge, Eel River, York Co.,
 and Lower Norton, N.B. (*Hay*.) Common in Quebec. (*Brunet*.)
 Isle of Orleans. (*Thomas*.) Vicinity of Ottawa. (*Fletcher Fl. Ott.*)
 Mirvin's Woods, Prescott. (*Billings*.) Common in Prince Edward
 County, and westward throughout Ontario.

(819.) **C. Pacifica**, Aschers.*C. alpina*, Hook. Pl. Bourgeau, 256.

Alpine Rocky Mountains, Bow River Pass. (*Bourgeau*.) Rocky
 Mountains, near the sources of the Columbia. (*Drummond*.) Mountain
 woods, west side of Rocky Mountains. (*Cowley*.)

XXXIX. MELASTOMACEÆ. MELASTOMA FAMILY.

203. RHEXIA, Linn. (MEADOW BEAUTY.)(820.) **R. Virginica**, Linn.

Sandy swamps; very rare. Shores of Muskoka Lake, also Lake
 Joseph, in the same region, Ont. (*Burgess*.)

XL. LYTHRACEÆ. LOOSESTRIPE FAMILY.

204. LYTHRUM, Linn. (LOOSESTRIPE.)(821.) **L. alatum**, Pursh.

Wet places; very rare in Ontario. Malden, Detroit River. (*Mac-*
lagan.)

(822.) **L. Salicaria**, Linn.*L. Salicaria*, var. *pubescens*, Pursh, 334.

Wet meadows; abundant in Upper Canada, Ont. (*Douglas*.) [?] I
 suspect this refers to the next species. (*M*.) Moist meadows near
 the Quarantine Station, Quebec. (*Brunet*.)

205. NESŒA, Juss. (SWAMP LOOSESTRIFE.)(823.) **N. verticillata**, HBK.*Lythrum verticillatum*, Linn. Michx. Fl. I., 281.*Decodon verticillatum*, Ell. Hook. Fl. I., 219.

Muddy margins of lakes and ponds throughout Ontario; quite common. Montreal, Q. (*Maclean*.) Mouth of River St. Pierre, near Montreal, Q. (*Holmes*.)

XII. LOASACEÆ. LOASA FAMILY.

206. MENTZELIA, Plumier. (BARTONIA.)(824.) **M. albicaulis**, Dougl.*Bartonia albicaulis*, Hook. Fl. I., 222.

Along the Fraser and Thompson Rivers, from Boston Bar to the Nicola River, B.C. (*Macoun*.) Dry ground near Spence's Bridge, B.C. (*Hill*.)

(825.) **M. lævicaulis**, Torr. & Gray.*Bartonia lævicaulis*, Dougl. Hook. Fl. I., 221.*B. parviflora*, Dougl. Hook. Fl. I., 221.

On the gravelly islands and rocky shores of the Upper Columbia. (*Douglas*.) Along the Similkameen River, B.C. (*Dawson*.) *Macoun's* Cat., No. 710.

(826.) **M. ornata**, Torr. & Gray.*Bartonia ornata*, Pursh, 326.

Sheltered valley, Foot-hills of the West Butte, Lat. 49°. (*Dawson*.)

XLII. CURCUBITACEÆ. GOURD FAMILY.

207. SICYOS, Linn. (STAR CUCUMBER.)(827.) **S. angulatus**, Linn.*Elaterium trifoliatum*, Linn. Torr. & Gray, Fl. I., 697.

Spontaneous in gardens, and around houses and barns, climbing over

IFE.)

quite com-
Pierre, near

A.)

Bar to the
Bridge, B.C.

Columbia.
Macoun's

(Dawson.)

R.)

mbing over

*abundant on the hills opposite the Hotel Spencer. Also
Travel led to river banks, Thompson River Aug 4 '86. H.C.*

(

to
R
L

(8

St

(8

tu

fences, &c. Vicinity of Montreal. (*Brunet.*) St. Johns, Q. (*MacLagan.*) Waste heaps, and around gardens at Belleville, Ont. (*Macoun.*) Vicinity of Hamilton. (*Logie.*) Port Dover, Ont. (*Burgess.*)

208. ECHINO CYSTIS, Torr. & Gray. (WILD BALSAM APPLE.)

(828.) **E. lobata**, Torr. & Gray.

Momordica echinata, Hook. Fl. I., 220.

Sicyos lobatus, Michx. Fl. II., 217.

Spontaneous around dwellings in Ontario, but indigenous in the North-west. Dartmouth, near Halifax, N.S. (*Dawson.*) Intervales and islands at the mouth of the Keswick, N.B. (*Moser.*) Saint Laurent and Lotbinière. (*Brunet.*) Cayuga, Ont. (*MacLagan.*) Vicinity of Hamilton, Ont. (*Buchan.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Belleville and near Campbellford, Ont.; Fort Francis, Rainy River, Dawson Route; in the Qu'Appelle valley, near the source of the river. (*Macoun.*) Plains of the Red and Assiniboine Rivers, and banks of the Saskatchewan. (*Drummond, Douglas.*)

XLIII. CACTACEÆ. CACTUS FAMILY.

209. MAMILLARIA, Haworth.

(829.) **M. vivipara**, Haworth.

Cactus viviparus, Nutt. Pursh, 735.

Sand Hills at Flat Creek, west of Brandon, and on all sandy tracts to the west and south throughout the prairie region. (*Macoun.*) Wood End, Long. 103°; and Woody Mountain and westward to Long. 111°, Lat. 49°. (*Dawson.*)

210. OPUNTIA, Jour. (PRICKLY PEAR.)

(830.) **O. Rafinesquii**, Engelm. Macoun's Cat., No. 712.

Abundant on sand at the southern end of Pelee Point, Lake Erie. Said to grow on Long Point. (*Macoun.*)

(831.) **O. Missouriensis**, DC. Prickly Pear.

We refer all our eastern forms to this species, but without being certain, as specimens have seldom been preserved. The Qu'Appelle valley,

about two miles from its mouth, and the north bank of the Assiniboine above Shell River, are the most eastern localities known. It is found at Moose Jaw Creek and at the Elbow of the south Saskatchewan, and thence south and west to Long. 112° at the Hand Hills. A species which I believe to be the same, reappears again on the north bank of the Peace River, Lat. $56^{\circ} 12'$, where it grows on the arid clay slopes, exposed often to a temperature of 55° below zero. It is found from Fort St. John to 50 miles below Dunvegan, or for a distance of 150 miles. (*Macoun*.) On the boundary, Lat. 49° , it appears in Long. 103° , and disappears in Long. 111° . (*Dawson*.)

(832.) **O.** — ? *Macoun's Cat.*, No. 713.

Abundant in the dry interior of British Columbia, from Spence's Bridge to Cache Creek and eastward to or near Kamloops. (*Macoun & Hill*.)

XLIV. FICOIDEÆ. ICE PLANT FAMILY.

211. MOLLUCO, Linn. (INDIAN CHICKWEED.)

(833.) **M. verticillata**, Linn. Carpet Weed.

An immigrant from further south. On a sandy shore, subject to inundations, Grand Lake, N.B. (*Fowler's Cat.*) Borders of rivers near Montreal. (*Brunet*.) Island of Montreal. (*Holmes*.) Malden, Ont. (*MacLagan*.) On the railway track between Niagara Falls and Queenston. (*Macoun*.) Point Pelee, Lake Erie. (*Burgess*.)

XLV. UMBELLIFERÆ. PARSLEY FAMILY.

212. HYDROCOTYLE, Tourn. (WATER PENNY WORT.)

(834.) **H. Americana**, Linn.

Shady damp places and along brooks. Three Mile House, near Halifax, N.S. (*Lawson*.) In shady, damp or springy places, common, N.B. (*Fowler's Cat.*) Common throughout Quebec and Ontario, but seldom collected.

213. SANICULA, Tourn. (SANICLE. BLACK SNAKE-ROOT.)

(835.) **S. Canadensis**, Linn. Canada Sanicle.

S. Marylandica, var. *Canadensis*, Torr. Hook. Fl. I., 257.

S. Marylandica, Torr. & Gray, Fl. I., 602. in part.

Rich, cool woods and thickets. Vicinity of Ottawa. (*Fletcher Fl.*)

ssiniboine
t is found
atchewan,
A species
h bank of
ay slopes,
und from
ce of 150
ong. 103°,

Spence's
Macoun &

D.)

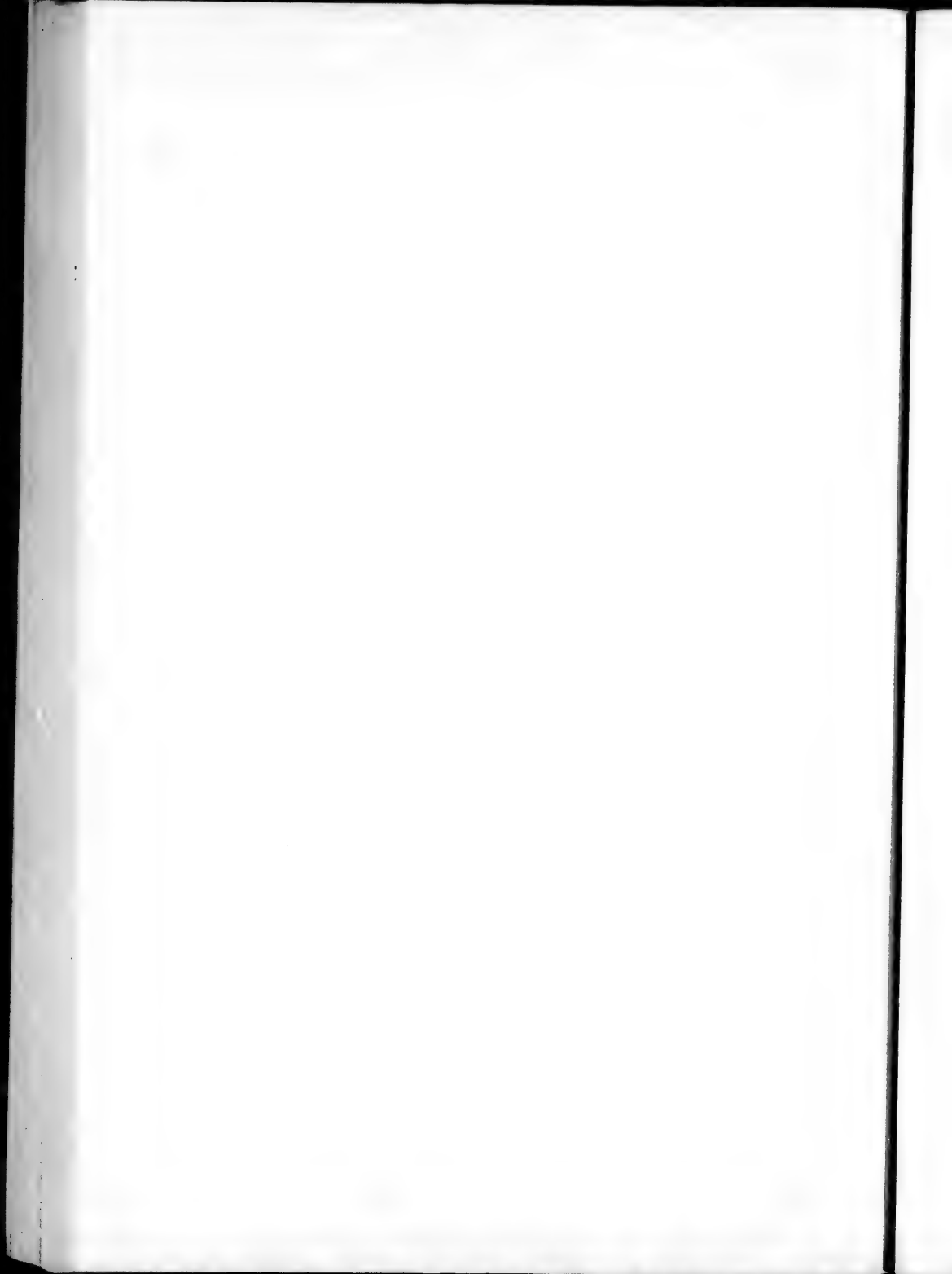
subject to
of rivers
Malden,
Falls and

WORT.)

use, near
common,
tario, but

SNAKE-

tcher Fl.



Ott.) Woods near Picton, Prince Edward Co.; near Belleville, and rich woods, Niagara Falls and Amherstburg, Lake Erie, Ont. (*Macoun.*) Woods west of Hamilton, Ont. (*Buchan.*) Near Barrie on Lake Simcoe, Ont. (*Spotten.*) Neighborhood of London, Ont. (*Burgess.*) Malden, Ont. (*MacLagan.*)

(836.) **S. Marylandica**, Linn.

Rich, cool woods; extending from Cape Breton and the Magdalen Islands in the Gulf of St. Lawrence, and in Newfoundland; also through Nova Scotia, New Brunswick, Quebec, Ontario, and westward to the Rocky Mountains. It is quite constant in character, and easily distinguished from the preceding species by the flowers.

(837.) **S. Menziesii**, Hook. & Arn.

North-west coast of America. (*Menzies.*) Abundant in the vicinity of Victoria, Vancouver Island. (*Macoun.*)

(838.) **S. arctopoides**, Hook. & Arn.

North-west coast of America. (*Menzies.*) Vicinity of Victoria, Vancouver Island. (*Macoun.*) Queen Charlotte Islands. (*Dawson.*)

(839.) **S. bipinnatifida**, Dougl.

Doubtless along the southern boundary of British Columbia, Lat. 49°.

214. **CONIUM**, Linn. (POISON HEMLOCK.)

(840.) **C. maculatum**, Linn.

Naturalized in towns and cities, from Europe. Very common in the vicinity of Quebec. (*Brunt.*) Naturalized in many parts of Quebec. (*MacLagan.*) Common at Bath, along the Bay of Quinte; in the village of Norham, Northumberland Co., Ont.; and waste places, Toronto. (*Macoun.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Very abundant in the city of London, Ont. (*Burgess.*)

215. **MUSENIUM**, Nutt.

(841.) **M. divaricatum**, Nutt.

Seseli divaricatum, Pursh, 732.

Abundant at Brandon, Manitoba, and on exposed slopes of the Assiniboine and other rivers south-west to the Rocky Mountains; also at Manitoba House, Lake Manitoba. (*Macoun.*) Pembina Mountain and Woody Mountain, N.W.T. (*Dawson.*)

Var. **Hookeri**, Torr. & Gray.*Seseli divaricatum*, Hook. Fl. I., 264.*M. angustifolium*, Torr. & Gray, Fl. I. 642.

About Carlton House, on the Saskatchewan. (*Douglas*.) In the vicinity of the Hand Hills, Long. 112°. (*Macoun*.)

(842.) **M. tenuifolium**, Nutt. Pl. Bourgeau, 263.

Rocky Mountains, Bow River Pass, Lat. 51°. (*Bourgeau*.) Dry bank, foot hills of Rocky Mountains. (*Dawson*.)

216. ERIGENIA, Nutt. (HARBINGER-OF-SPRING.)

(843.) **E. bulbosa**, Nutt.

Sison bulbosum, Michx. Fl. I., 169.*Hydrocotyle composita*, Pursh, 190.*H. ambigua*, Pursh, 732.

Very abundant in rich woods around London, Ont. (*Burgess*.) Near St. Thomas, Ont. (*Buchan*.)

217. APIUM, Linn. (PARSLEY, CELERY.)

(844.) **A. Petroselinum**, Linn. Parsley.

This species has become spontaneous in old gardens and on waste heaps. It propagates itself freely from seed. (*Macoun*.)

218. CARUM, Koch. (CARRAWAY.)

(845.) **C. Carui**, Linn. Garden Carraway.

Escaped from cultivation in all old settlements, and becoming a weed in many places.

(846.) **C. Gairdneri**, Benth. & Hook.

Edosmia Gairdneri, Nutt. Torr. & Gray, Fl. I., 612.

In the beds of spring torrents or brooks which are dry in summer, from Old Wives Lakes to and beyond the Cypress Hills, N.W.T. (*Macoun*.) South Fork of Belly River, abundant, Lat. 49°. (*Dawson*.)

219. PIMPINELLA, Linn. (BURNET SAXIFRAGE.)

(847.) **P. integerrima**, Benth. & Hook.

Smyrniium integerrimum, Linn. Pursh, 196.*Zizia integerrima*, DC. Macoun's Cat. No. 733.

Dry, gravelly or sandy woods and thickets. Quebec, Isle of Orleans.

In the

Dry bank,

NG.)

s.) Near

on waste

g a weed

summer,
N.W.T.
Dawson.)

GE.)

Orleans.

Close and narrow

(*Thomas.*) Montreal Mountain. (*MacLagan.*) Abundant from Prescott westward throughout Ontario.

220. *THASPIUM*, Nutt. (MEADOW PARSNIP.)

(848.) ***T. barbinode***, Nutt.

Ligusticum barbinode, Michx. Fl. I., 167.

Vicinity of London, Ont. (*Burgess.*) On the Canada Southern Railway, between Colechester Station and Amherstburg. (*Macoun.*) Chippawa and Detroit River. (*MacLagan.*)

(849.) ***T. aureum***, Nutt.

Smyrniolum aureum, Linn. Michx. Fl. I., 171.

Sison trifoliatum, Michx. Pursh, 194.

Zizia aurea, Koch. Hook. Fl. I., 260.

Dry thickets and moist river banks. Along the St. John River, N.B. (*Fowler's Cat.*) Quebec, Isle of Orleans, and other places. (*Brunet.*) Nun's Island, near Montreal. (*Holmes.*) Montreal Mountain; and Knowlton, Eastern Townships. (*McGill Coll. Herb.*) Banks of Conway's Creek, Prescott. (*Billings.*) Prince's Island, near Hamilton, Ont. (*Logie.*) Islands in the Detroit River. (*MacLagan.*) Common around London, Ont. (*Burgess.*)

(850.) ***T. trifoliatum***, Gray.

Smyrniolum cordatum, Walter. Pursh, 196.

S. trifoliatum, Muhl. Richards. in Frankl. Journ., 6.

Thaspium cordatum, Torr. & Gray, Fl. I., 615.

Zizia cordata, Koch. Hook. Fl. I., 260.

Abundant from the eastern borders of the prairie westward to the Rocky Mountains, and northward to the Peace River. (*Macoun.*) Abundant over the first and second prairie steppes, Lat. 49°. (*Dawson.*) Saskatchewan, and the River Winnipeg, and the prairies of the Rocky Mountains. (*Drummond.*) This species is quite variable, but we have not limited the varieties.

221. *CICUTA*, Koch. (WATER HEMLOCK.)

(851.) ***C. maculata***, Linn. Spotted Cowbane.

Sium (?) *Douglasii*, DC. Hook. Fl. I., 263.

From the Atlantic to the Coast Range of British Columbia, and north on the Mackenzie to Lat. 64°. Coast east of Mackenzie River. (*Hook. Arct. Pl.*) The roots of this and following species are deadly poisons.

(852.) **C. virosa**, Linn. Musquash Poison.

Frequent from the Red River westward, on wet spots on the prairie, and quite common in the wooded country on the Saskatchewan, Athabasca and Peace Rivers. (*Macoun.*) Wooded country of the interior, from Lat. 54°-64°. (*Richardson.*) North end of Lake Winnipeg to York Factory. (*R. Bell.*) Coast east of Mackenzie River. (*Hook. Arct. Pl.*)

(853.) **C. bulbifera**, Linn.

Common in swamps throughout Nova Scotia, New Brunswick, Quebec and Ontario. From York Factory, Hudson's Bay, to the Saskatchewan. (*Drummond.*)

222. SIUM, Linn. (WATER PARSNIP.)(854.) **S. cicutæfolium**, Gmelin.

S. lineare, Michx. Macoun's Cat., No. 737.

S. latifolium, Bigel. Hook. Fl. I., 262.

Apium lineare. Benth. & Hook. Gen. Pl. I., 888 and 893.

Wet places and ditches from the Atlantic to the Pacific and north to the Peace River country. (*Macoun.*) Coarse leaved forms of this species have been taken for *S. latifolium*, which is unknown in America

222. CRYPTOTÆNIA, DC. (HONEWORT.)(855.) **C. Canadensis**, DC.

Sison Canadense, Linn. Michx. Fl. I., 168.

Cherophyllum Canadense, Crantz. Pursh, 195.

Rich, damp woods, Woodstock, N.B. (*Fowler's Cat.*) Very abundant in rich, low woods throughout Quebec and Ontario.

224. CHÆROPHYLLUM, Linn. (CHERVIL.)(856.) **C. procumbens**, Crantz.

Abundant on White Island, in the Detroit River, opposite Amherstburg. (*Macoun.*)

225. BUPLEURUM, Linn. (THOROUGH WAX.)(857.) **B. ranunculoides**, Linn.

Foot-hills of the Rocky Mountains, Lat. 49°. (*Dawson.*) Cape

e prairie,
n, Atha-
interior,
nipeg to
(*Hook.*

ick, Que-
the Sas-

north to
of this
America

abundant

)

Amherst-

X.)

) Cape

Galton's

Mulgrave in Behring's Straits. (*Lay & Collie.*) Port Clarence to Cape Lisburne; and Norton Sound. (*Kothr. Alask.*) East of Mackenzie River. (*Hook. Arct. Pl.*)

226. OSMORRHIZA, Raf. (SWEET CICELY.)

(858.) **O. longistylis**, DC. Smoother Sweet Cicely.

Pictou, N.S. (*McKay.*) Rich woods, Woodstock, N.B. (*Fowler's Cat.*) Crevices of rocks, St. Croix, Q. (*Brunet.*) Lachine Woods and Montreal Mountain. (*McGill Coll. Herb.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Wind Mill Point, Prescott, Ont. (*Billings.*) Hamilton, Ont. (*Buchan.*) Vicinity of London, Ont.; Wood Mountain, N.W.T., Lat. 49°. (*Burgess.*) Ox Point, near Belleville; at Collingwood, and up the Kaministiquia River, Lake Superior; Moose Jaw Creek and Hand Hills, N.W.T. (*Macoun.*) On the Saskatchewan. (*Drummond.*) Near Winnipeg. (*Bourgeau.*)

(859.) **O. brevistylis**, DC. Hairy Sweet Cicely.

Osmorrhiza brevistylis, Taylor, Michx. Fl. I., 170.

Osmorrhiza brevistylis, Claydon, Pers. Pursh, 195.

Rich, damp woods, from Nova Scotia and New Brunswick, throughout Quebec and Ontario, and westward to the Rocky Mountains. It is probable that the Rocky Mountains and British Columbia form belongs to the next species. I place all notices from those regions under it.

(860.) **O. nuda**, Torrey.

O. brevistylis, Bong. Hook. Fl. I., 272, in part.

O. divaricata, Nutt. Torr. & Gray, Fl. I., 639.

Woody places on the west side of the Rocky Mountains. (*Drummond.*) From Lat. 49° to Observatory Inlet, in Lat. 55°, on the West Coast. (*Douglas.*) Frequent in the lower valley of the Fraser. (*Macoun.*) Eastern base of the Cascades on Skagit River, B.C.; S. Kootanie Pass, Lat. 49°. (*Dawson.*) Rocky Mountains, Bow River Pass, Lat. 51°. (*Bourgeau.*) Ounalashka and Sitka. (*Kothr. Alask.*)

227. GLYCOSMA, Nutt.

(861.) **G. occidentale**, Nutt. Torr. & Gray, Fl. I., 639.

Myrrhis occidentalis, Benth. & Hook. Gen. Fl. I., 897.

On the Rocky Mountains in the Kootanie Pass. (*Dawson.*)

228. ÆTHUSA, Linn. (FOOL'S PARSLEY.)(862.) **Æ. Cynapium, Linn.**

A weed in gardens. Introduced with garden seeds from Europe. Occasional in New Brunswick. (*Fowler's Cat.*) A weed in gardens at Belleville, Ont.; also, Seymour, Northumberland Co., Ont. (*Macoun.*)

229. ANTHRISCUS, Pers. (BEAKED PARSLEY.)(863.) **A. vulgaris, Pers.** Common Beaked Parsley.

Introduced from Europe at Bedford, N.S. (*Lindsay.*)

230. LICUSTICUM, Linn. (LOVAGE.)(864.) **L. Scoticum, Linn.** Scotch Lovage.

Newfoundland. (*Miss Brenton.*) Pictou, N.S.; St. Paul's Island, Gulf of St. Lawrence, and Cape Breton. (*McKay.*) Halifax, N.S. (*Lawson.*) Near salt water on banks and rocks, N.B. (*Fowler's Cat.*) Common on the cliffs along the Bay of Chaleur and along the Gaspé coast to Rivière du Loup, Q. (*Macoun.*) Tadousac and Labrador coast. (*Brunet.*) Observatory Inlet. (*Scouter.*) Behring's Straits. (*Chamisso.*) Sitka, Kodiak, Kotzebue Sound, and Norton Sound. (*Rothr. Alask.*) South Greenland. (*Hook. Arct. Pl.*)

(865.) **L. actæifolium, Michx.** Fl. I., 166.

Ferula Canadensis, Linn. Hook. Fl. I., 268.

Angelica lucida, Bart. Pursh, 193.

Thaspium actæifolium, Nutt. Hook. Fl. I., 265.

Parsboro', N.S. (*How.*) Near Tadousac, on the banks of the St. Lawrence. (*Michaux.*) A very doubtful species: more likely the preceding one.

231. SELINUM, Linn. (HEMLOCK PARSLEY.)(866.) **S. Canadense, Michx.**

Onidium Canadense, Spreng. Hook. Fl. I., 264.

Conioselinum Canadense, Torr. & Gray. Macoun's Cat., 734.

Wet borders of streams. Not very common, N.B. (*Fowler's Cat.*) Mouth of the St. Lawrence. (*Michaux.*) On sea cliffs along the Gaspé coast; also in a peat bog on the top of Mount Albert, Shickshock

Europe.
rdens at
Macoun.)

Y.)

Island,
ax, N.S.
r's Cat.)
e Gaspé
or coast.
namisso.)
Alask.)

the St.
ely the

.)

r's Cat.)
e Gaspé
ckshock

e
a
C
C
b

Mountains, altitude 4,000 feet. (*Macoun.*) Lotbinière and Tadousac, on the rocks. (*Brunet.*) Seashore, Rivière du Loup. (*Thomas.*) Lake Temiscouta, Q. (*MacLagan.*) Galt and Hamilton, Ont. (*Buchan.*) Vicinity of London, Ont. (*Burgess.*)

(867.) **S. Pacificum**, Watson.

Two species are found in North-western America, which I place provisionally under this and the next species. All references are placed under the next. I follow Watson in the synonymy.

(868.) **S. Benthami**, Watson.

Conioselinum Fischeri, Bong. Hook. Fl. I., 266.

Laserpitium hirsutum, Hook. & Arn. Hook. Fl. I., 270.

Labrador. (*Morrison.*) Arctic sea coast, between the Coppermine and Mackenzie Rivers. (*Richardson.*) Straits of De Fuca, on the North-west coast. (*Scouler.*) Sitka, Ounalashka, Kotzebue Sound and Arctic coast. (*Rothr. Alask.*)

232. ANGELICA, Linn. (ANGELICA.)

(869.) **A. genuflexa**, Nutt.

Common in northern British Columbia, and in woods on the Peace River, at the Rocky Mountain Canyon, Lat. 56°. (*Macoun.*)

(870.) **A. lucida**, Linn.

Canada. (*Pursh.*) Neither Sir William Hooker nor any American writer throws any light on this species; but should it be an American species, distinct from others, it will likely be found in Newfoundland or on the coast of Labrador.

233. ARCHANGELICA, Hoffm. (ARCHANGELICA.)

(871.) **A. atropurpurea**, Hoffm. Great Angelica.

Angelica atropurpurea, Lindl. Hook. Fl. I., 267.

A. triquinata, Michx. Pursh, 193.

On low grounds along streams. Coast of Labrador. (*Butler.*) West coast of Newfoundland. (*J. Bell.*) Bartlog, Northumberland Co., and at Harris' Cove, on the Kennebecasis, N.B. (*Fowler's Cat.*) Isle of Orleans, Saint Lambert and Lotbinière, Q. (*Brunet.*) Coast of Gaspé, Q.; Flats of Salmon River, Hastings Co.; Cold Creek Flats, Northumberland Co., Ont.; up the Kaministiquia and along the north shore of

Lake Superior, and on Michipicotin Island. (*Macoun.*) Vicinity of London, Ont., rare. (*Saunders.*) Near Hamilton, Ont. (*Logie.*) Dundas and Fullerton, Ont. (*Buchan.*)

(872.) **A. Cmelini**, DC.

A. officinalis, Hook. Fl. I., 267.

A. peregrina, Nutt. Torr. & Gray, Fl. I., 622.

Coast of Labrador. (*McGill Coll. Herb.*) On the shore of Courtney Bay, near the Penitentiary, N.B. (*Fowler's Cat.*) Abundant on the Gaspé coast, from Grand Etang to Ste. Anne des Monts. (*Macoun.*) Queen Charlotte Islands. (*Dawson.*) Sitka, Ounalashka and Kotzebue Sound. (*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*)

(873.) **A. hirsuta**, Torr. & Gray.

Ferula villosa, Walt. Pursh, 192.

Angelica triquinata, Nutt. Hook. Fl. I., 267.

Both Pursh and Michaux credit this species to Canada. It will probably be found in south-western Ontario.

234. CYMPTERUS, Raf.

(874.) **C. terebinthinus**, Torr. & Gray.

C. albiflorus & *thapsoides*, Torr. & Gray, Fl. I., 625.

C. feniculaceus, Torr. & Gray, Fl. I., 624.

Selinum terebinthinum, Hook. Fl. I., 266.

On the Rocky Mountains in the Kootanie Pass, Lat. 49°. (*Dawson.*) It will likely be found in the mountains along the same parallel to the coast.

(875.) **C. glomeratus**, Raf.

Selinum acule, Pursh, 732.

Ferula (?) *Palmella*, Hook. Fl. I., 268.

About Carlton House, on the Saskatchewan. (*Drummond.*) Souris River, Lat. 49°. (*Burgess.*) At Wood End, N.W.T., Lat. 49°. (*Dawson.*)

235. PEUCEDANUM, Linn. (HOG'S FENNEL.)

(876.) **P. leiocarpum**, Nutt.

Seseli leiocarpum, Hook. Fl. I., 263.

P. triternatum, Gray, Proc. Am. Acad. VIII., 385.

On the dry interior of British Columbia, east of the Coast Range. (*Macoun & Dawson.*)

vicinity of
(*Logie.*)

Courtney
at on the
Macoun.)
Kotzebue

It will

Dawson.)
parallel to the

) Souris
Dawson.)

EL.)

at Range.

Reed - 1881

(

(

a
E
lo
B

(8

lar
Pa
ch
Th
on

(877.) **P. triternatum**, Nutt.*Seseli triternatum*, Pursh. Hook. Fl. I., 264.

Will very likely be found along the southern boundary of British Columbia.

(878.) **P. ambiguum**, Nutt.*P. laevigatum*, Nutt. Torr. & Gray, Fl. I., 627.

Along the Fraser River in the vicinity of Yale, B.C. (*Macoun.*)

(879.) **P. utriculatum**, Nutt.

Vicinity of Victoria, Vancouver Island, and along the Fraser, above Yale, B.C. (*Macoun.*)

(880.) **P. fœniculaceum**, Nutt.*Ferula fœniculacea*, Nutt. Hook. Fl. I., 268, in part.

Carlton House, on the Saskatchewan. (*Drummond.*) On the Assiniboine, near Brandon, at the narrows of Lake Manitoba, and frequent on bluffs along the Coteau de Missouri, and the high banks of rivers, N.W.T. (*Macoun.*) Wood End, Souris River, N.W.T., Lat. 49°. (*Dawson.*)

(881.) **P. macrocarpum**, Nutt.*Ferula fœniculacea*, Hook. Fl. I., 268, in part.*Thaspium macrocarpum*, Pl. Bourgeau, 257.

Along the Fraser at Lytton, B.C. (*Macoun, Dawson.*) Saskatchewan Plains. (*Bourgeau.*)

(882.) **P. sativum**, Benth. & Hook. Common Parsnip.*Pastinaca sativa*, Linn. Macoun's Cat., No. 725.

Very common in many localities in and around gardens and orchards, and along roadsides. It has become thoroughly established in Ontario. Escaped from gardens in New Brunswick. (*Fowler's Cat.*) In various localities, Quebec. (*Brunet.*) Common in Manitoba and at many H. B. Co's. posts. (*Macoun.*)

236. HERACLEUM, Linn. (COW ARSNIP.)(883.) **H. lanatum**, Michx.

Very common in almost every part of the country, from Newfoundland and Labrador, and the islands in the Gulf of St. Lawrence to the Pacific and north to Sitka. The Indians of northern British Columbia chew the petioles of the leaves, and seem to relish the juice very much. The south-western branch of the Peace River is named the "Parsnip," on account of the abundance of this species in its valley.

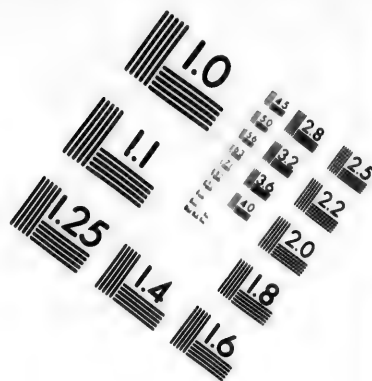
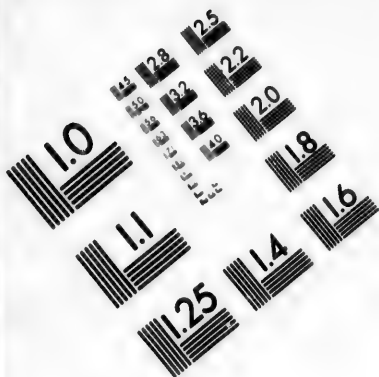
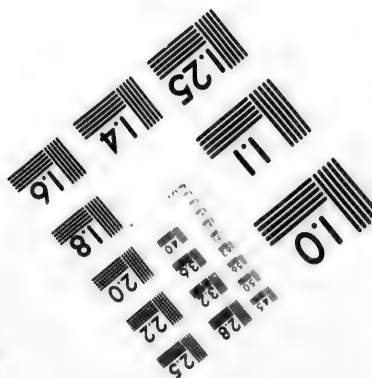
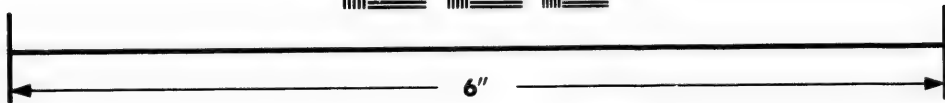
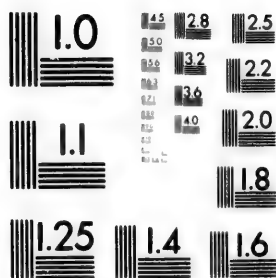


IMAGE EVALUATION TEST TARGET (MT-3)



Photographic Sciences Corporation

**23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503**

18
20
22
25
28
32
36
40
45
50
55
60
65
70
75
80
85
90
95
100

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

237. FERULA, Linn.

- (884.) **F. dissoluta**, Watson, Bot. Calif. I., 271.

F. dissecta, Gray. Macoun's Cat., No. 748.

Abundant on the mountain slopes above Spence's Bridge, B. C.

- (885.) **F. multifida**, Gray.

Leptotenia multifida, Nutt. Torr. & Gray, Fl. I., 636.

Common in rich grassy thickets, near Victoria, Vancouver Island. (Macoun.) Mountains in the S. Kootanie Pass, Lat. 49°. (Dawson.) All the specimens examined, of those two species, are very young and may be incorrectly determined.

238. DAUCUS, Tourn. (CARROT.)

- (886.) **D. pusillus**, Michx. var. **microphyllus**, Torr. & Gray.

D. microphyllus, Presl. Hook. Fl. I., 271.

Nootka Sound and Straits of De Fuca. (Scouler.) Abundant on dry hills around Victoria, Vancouver Island. (Macoun, Hill.)

- (887.) **D. Carota**, Linn. Cultivated Carrot.

Occasionally found, for a year or two, in gardens and fields, but can scarcely be said to have become spontaneous anywhere.

239. ARCHEMORA, DC. (COWBANE.)

- (888.) **A. rigida**, DC.

Sium rigidius, Linn. Pursh, 194.

Sison marginatum, Michx. Fl. I., 168.

Sandy or other swamps, western Ontario. Colchester Station, Canada Southern Railway. (Macoun.) Malden, Ont. (MacLagan.) Port Colborne. (McGill Coll. Herb.)

XLVI. ARALIACEÆ. GINSENG FAMILY.**240. ARALIA, Tourn. (GINSENG.)**

- (889.) **A. racemosa**, Linn. Spikenard.

On turned up stumps in damp woods. Common at Pictou, N.S.

dge, B. C.

er Island.
(*Dawson.*)
young and

t Gray.

unt on dry

s, but can

r Station,
(*MacLagan.*)

ctou, N.S.

F
F
(
w

(8

of
(D
Mc

(*McKay.*) Near Halifax. (*How.*) Rather uncommon in rich woods, N.B. (*Fowler's Cat.*) Quite common throughout Quebec and Ontario.

(890.) **A. hispida**, Vent. "Dwarf Elder."

Rocky and sandy woods and banks. Common from Newfoundland and the Magdalen Islands in the Gulf of St. Lawrence, westward throughout Quebec and Ontario to the Hudson's Bay. (*R. Bell.*)

(891.) **A. nudicaulis**, Linn. Wild Sarsaparilla.

Very abundant in rich, damp woods, from the Atlantic to the Rocky Mountains. On the west coast, Newfoundland. (*J. Bell.*) Throughout the wooded country of the interior and down the Mackenzie to Lat. 64°. (*Richardson.*)

(892.) **A. quinquefolia**, Desne. Ginseng.

Panax quinquefolium, Linn. Hook. Fl. I., 273.

Rich and cool woods; rather rare. Mossy woods near Montreal. (*Brunet.*) Montreal Mountain. (*Holmes.*) Belœil Mountain, Q. (*MacLagan.*) Miriwin's Woods, near Prescott. (*Billings.*) Kingston Mills, Ont. (*J. Bell.*) Woods rear of Picton, also at Belleville, and in Seymour, Brighton, Sidney and Cramahe, Ont.; Owen Sound and near Amherstburg. (*Macoun.*) Vicinity of Hamilton. (*Logie.*) Four miles north of London, rare. (*Saunders.*) Near Woodstock, Ont. (*Burgess.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*)

(893.) **A. trifolia**, Desne. Dwarf Ginseng.

Panax trifolium, Linn. Hook. Fl. I., 273.

Rich woods; rather local. Pictou, N.S.; rare. (*McKay.*) Cow Bay, near Halifax. (*Lindsay.*) Truro, N.S. (*Campbell.*) Rich woods, Hudson's Brook, Kent Co., N. B. (*Fowler's Cat.*) Charlesburg, Q. (*Brunet.*) Valley of the River Rouge, Q. (*D'Urban.*) Common in western Quebec. (*McGill Coll. Herb.*) Frequent throughout Ontario.

241. **FATSIA**, Benth. & Hook.

(894.) **F. horrida**, Benth. & Hook. Devil's Club.

Panax horridum, Smith. Hook. Fl. I., 273.

Echinopanax horridus, Desne. Macoun's Cat. No. 759.

North-west coast of America. (*Menzies.*) Abundant on the west side of the Rocky Mountains, from the source of the Columbia to Lat. 49°. (*Douglas.*) Queen Charlotte Sound. (*Scouler.*) East side of the Rocky Mountains, extremely rare. (*Drummond.*) Very abundant in Peace

River Pass, especially along the base of Mount Selwyn. (*Macoun.*)
Sitka and Kodiak. (*Rothr. Alask.*)

XLVII. CORNACEÆ. DOGWOOD FAMILY.

242. CORNUS. Tourn. (CORNEL. DOGWOOD.)

(895.) **C. Canadensis**, Linn. Dwarf Cornel. Bunchberry.

Very abundant in cool, sandy woods, from the Atlantic to the Pacific, across the whole of the wooded country, and north as far as the spruce extends. (*Richardson.*) Sitka. (*Rothr. Alask.*)

(896.) **C. Suecica**, Linn. Lapland Cornel.

Labrador. (*Brunet.*) Newfoundland. (*Morrison.*) Brandy Pots' Island, River St. Lawrence. (*Kelly.*) Sparingly along the shore at Rivière du Loup, Q. Coast of Newfoundland. (*McGill Coll. Herb.*) Behring's Straits. (*Chamisso.*) Common on the western coast of Alaska. (*Rothr. Alask.*) Greenland. (*Hook. Arct. Pl.*)

(897.) **C. Unalaskensis**, Ledeb.

Unalashka. (*Rothr. Alask.*)

(898.) **C. florida**, Linn. Flowering Dogwood.

Woods beside the Waterdown Road, in the valley below Ancaster and West Flamboro', also near Albion, vicinity of Hamilton. (*Logie.*) Niagara district. (*Maclagan.*) Very abundant on the line of the Canada Southern Railway, from St. Thomas to Amherstburg, Ont., and eastward to Fort Erie, at the foot of Lake Erie. (*Macoun.*) Near London, Ont. (*Burgess.*)

(899.) **C. Nuttallii**, Audubon. Westering Flowering Dogwood.

C. florida, Hook. Fl. I., 277, in part.

Quite common in the neighborhood of Yale, B.C. (*Macoun, Hill.*)

(900.) **C. circinata**, L'Her. Round Leaved Cornel.

C. tomentulosa, Michx. Fl. I., 91.

Dry, sandy thickets. Pictou, N.S. (*McKay.*) Windsor, N.S. (*How.*) Weldford, Kent Co., probably, not rare. (*Fowler's Cat.*) Lotbinière, and at St. Laurent. (*Brunet.*) On limestone rocks, River Rouge, Q. (*D'Urban.*) Bevil Mountain, Q.; and Niagara Falls. (*Maclagan.*) Thickets G. T. R. Gravel Pit, Prescott, Ont. (*Billings.*) Vicinity of Ottawa. (*Fletcher Fl. Ott.*) Common around Belleville and Rice

(Macoun.)

OOD.)

erry.

the Pacific,
the spruce

andy Pots'
e shore at
Coll. Herb.)
of Alaska.

v Ancaster
(Logie.)
ine of the
burg, Ont.,
un.) Near

gwood.

coun, Hill.)

f.S. (How.)
Lotbinière,
Rouge, Q.
MacLagan.)
Vicinity of
and Rice

899 very common all the way up the wagon Road from Zola to
600 at New Brunswick

Parliament Hill

I
e
(
a
(
V
an
(9
H
Sp

Lake Plains, and westward to Toronto; Owen Sound, and at Kababeka Falls, 30 miles west of Fort William, Lake Superior. (*Macoun.*) Mountain side, near Hamilton. (*Logie.*) Vicinity of London, Ont. (*Burgess.*)

(901.) **C. sericea**, Linn. Silky Cornel.

C. lanuginosa, Michx. Fl. I., 92.

On gravel bars in rivers and wet places. New Brunswick (no locality given.) (*Fowler's Cat.*) Very common on the borders of rivers in Quebec. (*Brunet.*) Bank of the Moira at Belleville, and in Prince Edward Co., Ont. (*Macoun.*) Chippawa and Malden. (*MacLagan.*) Vicinity of London, Ont. (*Burgess.*) This species is no doubt often included in the next.

(902.) **C. stolonifera**, Michx. Red-Osier Dogwood. Kinnikinnik. Arrow-wood.

C. alba, Lam. Hook. Fl. I., 276., in part.

C. sanguinea, Marsh. Hook. Fl. I., 276.

Very abundant in low grounds along streams, from the Atlantic to the Pacific, and northward to Lat. 69°, in the Mackenzie River valley. On the west side of the continent it is mixed with the next species, from which it may be distinguished by the straight appressed hairs on the young shoots.

(903.) **C. pubescens**, Nutt.

C. alba, var. β . Hook. Fl. I., 276. Macoun's Cat., Nos. 762 and 765.

C. sericea, var. (?) *occidentalis*, Torr. & Gray, Fl. I., 652.

North-west coast. (*Menzies.*) On the Thompson, at Spence's Bridge, B.C. [?] (*Macoun.*) All British Columbia forms should be carefully collected in fruit.

(904.) **C. asperifolia**, Michx. Rough-leaved Cornel.

Abundant on Pelee Point, Lake Erie, growing in sand. It is probable this species is common along the Lake Erie shore. (*Macoun.*)

(905.) **C. paniculata**, L'Her. Panicleed Cornel.

Dry, sandy thickets and borders of fences. Halifax, N.S. (*McKay.*) Vicinity of Ottawa. (*Fletcher Fl. Ont.*) Abundant throughout Ontario and possibly farther east than Ottawa, but taken for *C. sericea*.

(906.) **C. alternifolia**, Linn. Alternate-leaved Cornel.

A small tree on the borders of woods. Pictou, N.S. (*McKay.*) Halifax, N. S. (*Sommers.*) In open woods, N. B. (*Fowler's Cat.*) Sparingly in woods along the River Rouge, Q. (*D'Urban.*) Montreal

Mountain. (*Maclagan*.) Common from Ottawa to the west side of Lake Superior on the Kaministiquia. (*Macoun*.)

243. NYSSA, Linn. (PEPPERIDGE. SOUR GUM TREE.)

(907.) ***N. multiflora***, Wang. Pepperidge.

N. aquatica, Linn. Michx. Arb. Amer. II., 165.

N. biflora, Michx. Fl. II., 259. Pursh, 177.

N. villosa, Michx. Fl. II., 259. Pursh, 177.

One tree was observed in a field at Bismark on the Canada Southern Railway, and large numbers of fine trees in a "pepperidge swamp" between Essex Centre and Leamington, Ont. (*Macoun*.) Common report in the County of Essex, Ont., makes this an abundant tree in many swamps of that district.

st side of

(TREE.)

Southern
swamp."
Common
at tree in